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ABSTRACT

A report on two-year colleges is organized as follows: (1) introduction to the two-year colleges--why a report on two-year colleges, profile of two-year colleges (growth, enrollment, number and diversity), private two-year colleges, public two-year colleges, two-year college-business alliance, support and governance, role of two-year colleges, and non-traditional two-year colleges; (2) grants and funded projects in two-year colleges--funded projects of the American Association of Community and Junior Colleges, corporate contributions to two-year colleges, foundation grants to two-year colleges, and government funding of two-year colleges; and (3) areas of need and opportunity in two-year colleges (such as financial aid, curricular reform, bilingual/bicultural/minority/ethnic women's studies, specialized training, occupational education, improved guidance, remedial programs, and more responsive and individualized programs). A bibliography concludes the report. (KM)

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U.S. DEPARTMENT OF HEALTH
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EDUCATION

TWO-YEAR COLLEGES–
The current phenomenon in higher education

A SPECIAL SUPPLEMENT TO
THE HANDBOOK OF AID
TO HIGHER EDUCATION

COUNCIL FOR FINANCIAL AID TO EDUCATION, INC. • 6 E. 45TH ST., NEW YORK, N. Y. 10017

JC 730 282

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TWO-YEAR COLLEGES–
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April 1973

Division of Research
Council for Financial Aid to Education
6 East 45th Street, New York, N.Y. 10017

I. INTRODUCTION TO THE TWO-YEAR COLLEGES

> *"It has become commonplace to point to the community junior college movement as perhaps the most significant and certainly the liveliest phenomenon in American education."*
>
> Sidney P. Marland, Jr.
> *Assistant Secretary (HEW) of Education*

The public is accustomed to hearing of gaps: generation, credibility, communications. A major segment of American higher education is handicapped by yet another kind of gap, an image gap. To the layman "junior college" and "community college" may still suggest small, second-class institutions, perhaps in the former case a finishing school for women or in the latter a technical institute for those not clever enough for the prestigious universities.

Yet "phenomenal" is the most frequently used and most appropriate description of the growth of two-year colleges in recent years. Today 40% of our institutions of higher education are two-year colleges. Today between one-third and one-half of all stucents entering college attend a two-year college.

> *"The development of the community college is hailed by educational leaders as the most important innovation in higher education during the twentieth century."*
>
> W. K. Kellogg Foundation

Today nearly one-third of all undergraduate students are in two-year colleges, while in 1955 less than one-fifth were. Today more than half of America's minority students, attending college for the first time, are in two-year colleges. Large state higher education systems, like the State University of New York, today award more undergraduate degrees to two-year college graduates than to four-year college graduates. In Virginia two-year college enrollment has quadrupled in five years, and the number of community colleges has grown from two to 21. Today educators, businessmen, federal and local governments, and community groups are turning increasingly to two-year colleges to help meet local and national challenges. Tomorrow two-year colleges are expected to educate a larger and larger proportion of American youths *and* adults.

One can only speculate about all the reasons for this amazing rise in two-year college enrollment and in the number of these institutions. Higher education as a whole has expanded as a result of increases in the number of high school graduates, more widespread parental belief in higher education as a key to success, government financial aid to students, and the growing competition for jobs. In addition, the civil rights, ethnic minorities' and women's movements have raised public consciousness about the need for wider opportunity and raised hopes among these groups for access to the educational and employment mainstream. But two-year colleges specifically have attracted growing numbers of students because of their strong emphasis on preparation for a vast variety of careers, their geographical proximity to the communities they serve, and their symbiotic relationships with their communities.

These colleges' development—in number, size, quality, diversity and achievement—has been so rapid that public awareness has not kept pace. But more and more, foundations, corporations and government agencies are showing a growing respect for them, and in many cases are eliminating the obstacles which in the past categorically denied these colleges an appropriate share of attention and support.

> *"The company believes that the time has come to extend its direct-grant program to two-year schools because of the increase in the numbers of their graduates employed by Kodak and because of the contributions they are making to company progress."*
>
> Frederic S. Welsh
> *Vice President and Director, Corporate Relations*
> *Eastman Kodak Company*

WHY A REPORT ON TWO-YEAR COLLEGES?

Whatever their national image, two-year colleges are making major contributions to the education of young Americans. But their significance does not stop there. They have led the way in two of the strongest movements in higher education today: the movement toward a goal of post-secondary education for all, and the push toward broadened vocational or "career" education.

These two related movements have been advanced most dramatically by the public two-year colleges, usually called "community colleges." About half their students are enrolled for degree training leading to specific careers in business, industry, government, health and social services. The concept of vocational education has gained prestige in this technological age as unskilled and semi-skilled jobs become fewer and fewer, as students call for relevant education, as out-of-work space technicians must retrain for new jobs, as women seek careers at middle age, as workers need additional training for job advancement, and as leisure and retirement time grow. And as these examples would suggest, the community college student is, on an average, older than the traditional four-year college student.

In addition to this major expansion of career education opportunities, the two-year colleges have opened up the possibility of higher education to millions more Americans who in the past would not have aspired to--or been accepted by—any college. Many more students are able to attend because the community colleges, by and large, are characterized by open admissions policies and relatively low tuition. A further feature is their commitment, as community colleges, to serve the varied interests of the areas in which they are located and for which they were created.

Projections for the future suggest that many more community colleges will be created, that they will enroll even larger numbers of students, and that their functions will become even more important. Special attention will be given to the potential of two-year colleges to respond to changing manpower needs of the American economy. Many believe that the community college will develop into a true community center, providing leadership and organization to deal with the major needs of its area, be it rural, suburban or urban, affluent or poor.

This report has been prepared in an effort to encourage greater public awareness of the two-year colleges —of their current achievements and of their growing importance. Bound as they are to serving their communities' educational, employment, social and cultural needs, these colleges cannot pursue their goals alone. For example, greater communication is needed between the colleges and the future employers of their graduates. In addition, private financial support of the community and junior colleges must increase if it is to be commensurate with their role in higher education generally and with the service they perform in training skilled workers for the nation's employers.

"... the future role of community colleges within higher education in America is going to be a large one. These institutions are large in number and enrollment and have a commitment of flexible services to students and to local communities that will be increasingly recognized in the years to come. Therefore, I believe that community college and corporate cooperation in career education is most desirable, indeed essential to the interests of ... these institutions and to the corporations with whom they might join in better community and student services. ... The record to date of corporate and community college cooperation is a very meager one."

S. V. Martorana
Professor of Higher Education
Pennsylvania State University

PROFILE OF TWO-YEAR COLLEGES

Growth

The most salient characteristic in the two-year college field is growth. Of the hundreds of colleges organized from 1947 to 1970, two-thirds were founded as two-year community colleges and another 130 were founded as private two-year colleges. The earliest two-year colleges, private junior colleges, were established in the first years of the 20th century. Unlike other forms of American education, they were not modeled after European education; they originated in the United States. Two-year colleges grew fairly steadily until the 1960's at which time the rate jumped to the startling average of about fifty new ones a year. This rate was sustained through most of the decade.

Two-Year College Growth in Number and Enrollment

Year	Number of two-year colleges	Enrollment
1930	469	77,014
1940	627	206,984
1950	597	439,332
1960	678	660,216
1970	1,091	2,450,451

Projections for 1980 by the American Association of Community and Junior Colleges and by the U.S. Of-

fice of Education vary because of differing criteria.* However, as many as 300 new community colleges are anticipated by that date with total community and junior college enrollment around 4½ million.

Enrollment: Average Annual Rate of Growth

Year	Two-year Colleges	Four-year Colleges
1950-51 to 1960-61	11.0%	4.3%
1960-61 to 1970-71	13.7%	7.2%
1970-71 to 1980-81 (projected)	6.5%	3.7%

Early in the century private junior colleges held the majority, but, like four-year colleges and universities, enrollment in two-year public colleges now far outnumbers the private colleges' enrollment.

1972 Enrollment (estimated)

2-year public colleges	2,800,000
2-year private colleges	130,000
Total	2,930,000

There are now public two-year colleges in every state, although some states are clearly leaders in their development. California, New York, Illinois, Michigan, Florida, Texas and Washington enroll the majority of all community college students in the United States.

Number of two-year colleges by state—1970

State	Public	Private
Alabama	18	5
Alaska	7	1
Arizona	12	1
Arkansas	4	4
California	94	5
Colorado	16	0
Connecticut	15	7
Delaware	2	2
District of Columbia	1	2
Florida	27	5
Georgia	13	10
Hawaii	6	0
Idaho	2	2
Illinois	47	8
Indiana	2	2
Iowa	19	6
Kansas	20	5
Kentucky	16	7
Louisiana	7	1
Maine	5	1
Maryland	17	4
Massachusetts	16	17
Michigan	32	4
Minnesota	20	3
Mississippi	18	6
Missouri	15	7
Montana	3	0
Nebraska	12	1
Nevada	3	0
New Hampshire	1	3
New Jersey	14	8
New Mexico	9	0
New York	45	16
North Carolina	54	12
North Dakota	5	0
Ohio	35	3
Oklahoma	13	5
Oregon	15	1
Pennsylvania	33	16
Rhode Island	1	2
South Carolina	21	5
South Dakota	0	2
Tennessee	11	7
Texas	47	12
Utah	5	0
Vermont	1	4
Virginia	21	6
Washington	27	0
West Virginia	4	3
Wisconsin	28	3
Wyoming	7	0
American Samoa	1	0
Canal Zone	1	0
Puerto Rico	4	15

*Office of Education and AACJC definitions differ as to what institutions are included in the term "two-year institutions" and as to what makes up "enrollment." Government data, for instance, do not include the numbers of people served by two-year colleges in short-term courses, non-credit adult education programs, and courses transmitted by television, radio or mail.

Diversity

After growth, the second most obvious characteristic of two-year colleges is their diversity—in size, curriculum, student body, governance, and orientation. The colleges vary from small liberal arts institutions, many church-related, to independent women's schools where tuition may equal that of any four-year private college, to vocational-technical institutes focusing on career education, to comprehensive community and junior colleges attempting to serve a wide variety of local interests, to community college districts organized to serve various area needs in a systematic fashion, to statewide systems.

Since the early twentieth century when junior college programs paralleled the first two years of the four-year academic plan, their course offerings have branched into hundreds of fields. In addition to tradi-

> *"The uniquely American two-year colleges are called on to perform a greater variety of services for a more diverse clientele than any other category of higher education. The proof that the nation needs and values their comprehensiveness was spectacularly demonstrated in the sixties when enrollments more than doubled. They are projected to double again in the current decade, probably exceeding 4 million by 1980."*
>
> Clark Kerr
> *Chairman*
> *Carnegie Commission on Higher Education*

tional academic courses, career education has become a two-year college specialty. The graduate of a two-year college normally earns an associate degree, either Associate in Arts (A.A.) or Associate in Sciences (A.S.). Certificates are awarded to students—often working adults—who complete shorter intensive courses ranging from several weeks to a year. Certificate training usually leads directly to a specific job or to job advancement. Although career education initially was the bailiwick of vocational-technical schools and the community colleges, it is widespread now in privately-supported junior colleges as well.

PRIVATE TWO-YEAR COLLEGES

It becomes more difficult and, often, more misleading, to generalize about particular types and levels of institutions of higher education as the boundaries between them slip away. The community and junior colleges and their student bodies come in many forms, few of them clearcut or static. For example, it is no longer accurate to regard the private junior colleges as serving only a more affluent constituency. Many of those that did in the past are either changing or closing.

There are 240 private junior colleges educating about 130,000 students. Approximately 55% are religiously oriented or have direct church affiliation. The rest are referred to as independent junior colleges. Of the total number, seven are men's colleges and 37 women's. Private two-year colleges are often small compared with the public colleges; 87% have enrollments of under 1,000. A few have student bodies of less than 100, and some have enrollments of several thousand. The average enrollment is about 600. It should not be assumed that all private junior colleges have residential campus settings; it is estimated that about 25% of the colleges are strictly commuter colleges, especially those in major urban areas. The average total inclusive cost (tuition, fees, room and board, and other charges) at a residential college is about $2,500 per year. The average total cost for a commuter student is about $1,350 per year.

Traditionally, the private two-year colleges have offered one of two separate curricula: the majority offered liberal arts, university-parallel programs with many students transferring after graduation to continue their studies in four-year institutions; a smaller number of private colleges have had a vocational-technical orientation. Among the latter are Spring Garden College in Philadelphia with engineering and electronics programs and Robert Morris College in Pittsburgh specializing in business administration programs. Even in the traditionally liberal arts colleges, however, career education is gaining ground.

Chowan College in North Carolina offers a highly comprehensive printing technology program including computer typesetting. At Westbrook College in Maine only 12% of the students still choose exclusively liberal arts majors; the rest concentrate on training for employment, especially in the allied health field, or combine career education and liberal arts. Nearly one-third of the private two-year colleges now offer programs in allied health education, with a few of them devoted exclusively to this career area.

Although some private two-year colleges have experienced student recruitment problems of varying severity, many institutions have remained healthy by combining their traditional goals with academic innovations and creative leadership. Kendall College in Illinois, for example, offers women's studies, Afro-American studies, and a special individualized mathematics instruction laboratory. Cazenovia College in New York, in addition to liberal arts and employment-oriented courses, has an Adult Enrichment Program. It gives local citizens an opportunity to take credit courses and audit courses along with the college's resident students. A program in futuristics has been initiated at Alice Lloyd College in Kentucky. A number of colleges have established cooperative education programs and some have adopted the 4-1-4 calendar* and are using off-campus

*Two semesters surrounding a month of independent or intensive study in consultation with college faculty.

experimental learning situations to a greater degree. Some, such as Pine Manor Junior College in Massachusetts, have study abroad programs. And a good percentage of them have developed direct transfer agreements with many four-year colleges and universities. There is even a private junior college which is part of a major university: Oxford College, a component of Emory University, began awarding associate degrees in 1972.

Like their public college counterparts, private colleges increasingly recruit students from varied backgrounds and ethnic groups. Bacone College in Oklahoma, College of Ganado in Arizona and Sioux Empire College of Iowa serve predominantly native American Indian students. There are 20 traditionally black private two-year colleges such as Kittrell College in North Carolina and Mary Holmes College in Mississippi. A number of private junior colleges operate in Puerto Rico, the largest being Puerto Rico Junior College with 4,000 students.

In the big cities still more private two-year colleges are developing with large minority student bodies. Donnelly College in Kansas City, Kansas has 33% black students. Malcolm-King in Harlem serves largely working adults between the ages of 20 and 50 years. It began in 1968 with the assistance of Marymount Manhattan College, and now serves 500 students with career-oriented studies. Fordham University and Mount St. Vincent College are also helping Malcom-King operations.

An active private college whose description resembles the public community colleges is Central YMCA Community College in Chicago. It was founded in 1961 with 160 students and today enrolls 5,000 full-time and part-time students plus 13,000 evening students in an adult education program. The day-time student body reflects the college's cosmopolitan environment in central-city Chicago:

1,829 white, native born
1,503 foreign students from 63 countries
1,501 black Americans
72 Puerto Ricans
71 Chicanos
21 American Indians

Because of its "community" orientation, and its non-residential campus, the college can hardly be distinguished from the public community colleges.

"We have determined that there are 117 student mothers at Central "Y" now on the welfare rolls, who will soon be off welfare and gainfully employed as a result of their skill training at the College. We have 375 Viet Nam veterans, mostly Black, enrolled at this institution and seeking to enhance their live[illegible] effectiveness and thereby their employability. Twenty-seven graduates from our Allied Health program (all former high school drop-outs) were hired by Hines Hospital, as technicians, the day before their graduation last term. Six of our graduates last year received Ford Foundation scholarships to Ivy League Schools . . . seventeen of our graduates (from the West and Southside ghettos) were accepted at Dartmouth last Fall . . . a CYCC graduate of three years ago (an ex-con) is now on a graduate fellowship at the Harvard School of Business . . . another ex-con who rose from welfare family status, and graduated from Central "Y" was accepted at Harvard Law School last term."

Central YMCA Community College

National Council of Independent Junior Colleges

In 1969 the National Council of Independent Junior Colleges was established to serve the needs and interests of private non-profit two-year colleges. It is an affiliate of the American Association of Community and Junior Colleges, the national membership organization. The NCIJC works with its member colleges to facilitate communication between colleges; promote greater understanding of private two-year colleges through a national information program; stimulate new academic programs, institutional research, consortia and other cooperative arrangements; improve administration, teaching and counseling; and encourage federal, state, foundation and corporate financial support. The Council is developing several new programs in response to emerging needs of private two-year colleges. At present, activities are funded by membership dues from colleges and from contributed services of AACJC.

American Association of Community and Junior Colleges

The American Association of Community and Junior Colleges, a non-profit professional organization, was created in 1920. It provides leadership for the two-year college field as a whole and serves its extensive membership through staff activities in occupational education, government affairs, public service education, minority group programs, programs for servicemen and veterans, research and publications, guid-

ance in curriculum development and staff preparation, and programs for new and developing institutions. (A further description of AACJC is found in Section II under "Funded Projects of the American Association of Community and Junior Colleges.")

PUBLIC TWO-YEAR COLLEGES

The size and scope of public community and junior college activities are impressive.

Miami-Dade Junior College, day and night, full-time and part-time, enrolls about 36,500 students. The college was established in 1959 and now has three campuses plus four extension centers, one on an Air Force base. Among the student body are over a thousand Cuban refugees. The college offers two-year transfer programs and career programs of formidable variety, plus certificates of completion for various one-year programs in business and technical fields. In addition there are such courses as Afro-American dialects, Jewish history and American Indian arts and crafts. Students can study for careers in aviation administration, electronic data processing, fire science, marine electronics, radio and television broadcast, police science and criminology, secretarial science, aero-simulator technician/instructor, hotel-motel marketing, air conditioning and refrigeration, and dozens more.

Miami-Dade is currently the largest public two-year college but it is only a larger version of its hundreds of fellow community colleges around the country. (It is "currently" the largest since it is not unusual for a new community college to open its door for the first time to several thousand students whose ranks multiply each year.)

Serving an urban area, Miami-Dade is in the largest category of community colleges. According to a 1970 survey of the American Association of Community and Junior Colleges, approximately 39% of the public two-year colleges considered themselves urban (in location and populations served) while 24% thought of themselves as suburban; 37% responded to the survey by identifying themselves as rural.

There is no typical community college but most resemble Miami-Dade with both university-parallel curriculum and a heavy emphasis on career education. It is this emphasis on practical training for future employment which has attracted so much attention to and reliance on the community colleges.

> *"We can no longer afford to ignore the fact that a substantial amount of what we call education is of no demonstrable use to the student's cultural, philosophical, and spiritual self-fulfillment, or for his practical occupational preparedness."*
>
> Sidney P. Marland, Jr.
> *Assistant Secretary (HEW) of Education*

The federal government, through the Office of Education and other grant-making agencies, is definitely encouraging this thrust. Assistant Secretary (Department of Health, Education and Welfare) for Education, Sidney P. Marland, Jr., a strong supporter of the career education concept, has stated that the community colleges "... are truly a different breed of educational institution, growing at so rapid a pace because there is obvious and expanding need for their services particularly in view of the accelerating movement toward a workable system of career education."

> *"Since Commissioner Marland made career education one of the top priorities of the Office of Education, many OE-supported programs have come to reflect a career emphasis. Career Education, of course, is not a program of itself, but rather a concept that OE is attempting to infuse into every education program it supports. OE officials look confidently to the success of these programs to demonstrate the wisdom and practicality of the career approach, thereby encouraging State and local education agencies to embody the concept in their own programs."*
>
> *U.S. Office of Education*

In 1970, the AACJC inventoried two-year colleges to find out how extensive and varied career education courses were. The following table illustrates their findings.

Career Education Courses in Two-Year Colleges (1970)

Field of Study	Number of Program Titles	Number of Degree Programs
Agriculture and Natural Resources	44	885
Allied Health	64	1,388
Applied Arts	16	364
Business	85	3,538
Engineering, Science and Technology	68	2,550
Public Service	73	1,210

In addition, 3,710 certificate (less-than-degree) programs were reported.

In the years since then, it is certain these numbers have risen. The Association estimates that "*at least* one million students were . . . enrolled in job-entry level programs (Spring, 1972). These students were being taught by an estimated 40,000 instructors whose principal teaching duties were in these programs." Altogether it is believed there are about 13,000 associate degree programs in career education in the two-year colleges.

In many cases these courses are developed with the advice and assistance of potential employers: local business, industry, hospitals, government and social service agencies. Because the community colleges were created to serve their communities by providing education and community services, they tend to be responsive to individual regional needs. In training students to move into existing job markets, they can assist the graduate, the future employer and the community as a whole.

Additionally, these colleges have the potential to strengthen their locale by helping the previously unskilled to get jobs, and by training health, technical, and social services personnel to go to work in the community.

> *"Community college programs are important to industry because they undertake to prepare large numbers of students for the job market. They attempt to satisfy the man-power training requirements with formal school beyond high school level but less than a four-year degree."*
>
> *National Association of Manufacturers*

A survey by the American Association of Community and Junior Colleges indicated that a 1970 graduate of a two-year occupational program probably had a better opportunity for employment than a Ph.D. graduate. The demand for trained personnel in many semi-professional and technical fields is such that some two-year colleges are hosting more corporation recruiters than their four-year counterparts.

TWO-YEAR COLLEGE-BUSINESS ALLIANCE

There is a direct relation between business and industry and the two-year colleges which provide a trained workforce in literally hundreds of fields—technicians, engineers, machinists, accountants, clerical and secretarial help, supervisors and managers. Additionally community colleges provide *continuing* education for workers at all levels, from top management to the new laborer. Already there are many examples of business calling on colleges and colleges calling on business to work together toward goals of mutual benefit. In some cases the cooperation may be as logical as an industry communicating what its needs are for trained personnel, and the college educating students to fill those needs. Businesses are and will become more involved with two-year colleges in articulating their interests; providing teachers, equipment and facilities for on-the-job training; and arranging work-study (co-op education) programs.

One example of cooperation in the interest of both industry and education takes place in the San Mateo Junior College District (California), where over 500 employers are participating in the cooperative education program. In the first year of the program, students' combined earnings surpassed $8 million, the largest single source of student financial aid in the district.

"During the past 40 years, there has been a dramatic change in the amount of formal schooling considered necessary to participate in the world of work. In 1930, 83 percent of our jobs required no more than a high school diploma. Today, 50 percent require at least an associate degree–the kind granted by two-year colleges."

National Association of Manufacturers

Course listings in the catalogues of some community colleges give a good indication of the employment opportunities and needs of the area. To meet job qualifications of South Carolina textile industries, Greenville Technical Education Center, a two-year public college, trains students in textile trades. Logging and lumber companies in Montana hire workers graduated from the Timber Fallers program at Flathead Valley Community College. Flordia Keys Junior College offers training in the technologies needed for the marine-related businesses of the area.

Central Nebraska Technical College grew out of an area's economic needs. Central Nebraska towns had attempted to encourage industries to move into their area, but they found that companies were concerned with how limited their local industrial education was. Local Chamber of Commerce leaders informed the state legislature of this handicap and eventually voters were presented with a proposition to provide funds for a new vocational college. The vote was 83% favorable. The college grew from 196 students in 1966 to about 3,400 in 1972. There are now 33 occupational areas in which to train, and the college has a successful record of placing graduates in jobs.

"Community colleges have close ties with local business and industry and thus are able to direct their programs to employment conditions not as they are thought to exist . . . but as they actually are. . . ."

Sidney P. Marland, Jr.
Assistant Secretary (HEW) of Education

National Cash Register Company and Delaware Technical and Community College, Southern Branch, opened in Georgetown, Delaware at about the same time. Under special arrangements, every new employee at NCR spends at least one week in training at Delaware Tech, on company time, being introduced to their work at NCR and in some instances staying on for further training. The college coordinates this training while the company provides some of its employees as instructors. The college's dean of instruction believes that internships or cooperative efforts, where the employee is trained on the job, are the best learning methods for technicians. He also believes cooperation between the college and industry benefits everyone; the college itself attracts industry and through its leadership helps the area to grow in a carefully planned, orderly fashion.

Business became involved on a different level at Cuyahoga Community College in Cleveland. There a course surveying the principles, problems and procedures of business was taught by a number of prominent business executives. Their lectures were videotaped and now comprise a complete set of discussions on management positions.

One of the clearest illustrations of close industry-community college interdependence is the Fashion Institute of Technology. Situated in New York City's Garment District, this public two-year college describes its function as follows: "In order to serve the nationwide community of American fashion, F.I.T. is devoted exclusively to developing young men and women for creative and executive careers in fashion and its many allied industries." The college offers courses in clothing design, pattern making, machine operation, marketing management and merchandising, advertising, textile science, import buying, fashion photography, footwear, even foundation garment design. Particularly in the rapidly changing field of fashion, the college relies heavily on industry for guidance and support—and industry relies on the college for employees trained in up-to-date techniques and trends.

"If, then, as I believe, the relevance gap is the principal problem in education today, it is plain to me the gap can be closed only if industry will involve itself, intimately and permanently, in the operations of the educational institutions from which it draws talent."

Marvin J. Feldman
President
Fashion Institute of Technology

SUPPORT AND GOVERNANCE: PRIVATE COLLEGES

Private junior colleges depend particularly upon tuition and fees, private gifts and grants, and church affiliations as major sources of revenue. Tuition often represents the primary source of funds; in rare cases, student tuition and fees account for close to 100% of college operating income. Some private colleges have strong alumni support and some are successful at encouraging grants from foundations, corporations, businesses, and private individuals; to date, most private contributions come from organizations located near the college.

The governance of private two-year colleges closely resembles the governance patterns of private four-year colleges. Private boards of trustees are typically composed of prominent persons from the various professions, many of whom are local citizens. In the case of religiously oriented colleges, governance is drawn from religious or a combination of religious and lay sources. Boards range in size from six to 30 or more.

SUPPORT AND GOVERNANCE: PUBLIC COLLEGES

Support

The Carnegie Commission on Higher Education reported that "The community colleges are organized and supported in more varied and complex ways than are any other institutions of post-secondary education."

A general view of how public two-year colleges are financed, compared with other institutions of higher education, can be seen in the following table.

Other estimates could vary because of differing definitions, coverage of institutions, and years of data; however the table suggests the basic sources of support and the proportions they contribute. The Carnegie Commission and other observers have noted a change during the 1960's when the largest proportion of support for community colleges generally shifted from the local to the state level.

> *"They [community and junior colleges] are already facing complaints about the high cost of education, with particular reference to career training which often requires expensive equipment and laboratories. It will be necessary for the institutions to seek out a high degree of cooperation with local industry, government and other resources in sharing resources and know-how to get the job done."*
>
> Edmund J. Gleazer, Jr.
> *President*
> *American Association of Community and Junior Colleges*

The federal government contribution to community colleges, especially in such areas as vocational education and facilities construction, has grown. (Federal support is discussed further in Section II.) In addition to government funds, student tuition and fees add to operating revenues. Tuition charges in public colleges are an important issue. In California, community colleges have been almost free to residents (although this may change); in other states students may pay for up to one-third of the school's operating expenses. Opinions vary as to whether tui-

Support for Colleges by Source, 1968-69

	Private Institutions			Public Institutions		
	University	4-Year	2-Year	University	4-Year	2-Year
Federal Government	8.3%	4.2%	3.6%	10.0%	11.7%	5.9%
State Governments	2.7	0.8	0.2	58.2	63.5	41.4
Local Governments	0.6	0.2	0.3	0.4	3.2	36.0
Tuition and Fees	47.1	64.6	74.0	17.2	17.2	14.4
Endowment and Gifts	20.5	22.7	18.4	1.9	0.4	0.3
Other	20.8	7.5	3.6	12.2	3.3	2.0
	100 %	100 %	100 %	100 %	100 %	100 %

Note: Omits research revenues and student-aid grants. Columns may not add to 100 percent due to rounding.

Source: Committee for Economic Development Report of the Task Force on Alternate Sources of College Funding

tion charges are increasing or decreasing nationwide. There is a concern, however, about the validity of charging at a rate which *anyone* would find prohibitive if community colleges are to live up to the promise of providing higher education to all.

Voluntary support of public two-year colleges accounts for only a small share of community college revenue. However, it has played an important role, out of proportion to its size, in permitting colleges to move beyond the basic programs supported by government funds. Although the role of voluntary support is discussed at greater length in Section II, it should be noted here that many colleges regard the private sector as one of the most valuable sources of support.

Like a growing number of public four-year colleges and universities, many public two-year colleges are setting up a college-related "foundation." These foundations are used to receive, administer, and sometimes raise funds from non-governmental sources. The foundations enable public colleges to keep private contributions separate from government funds, to assure donors that funds will be used in accordance with their wishes.

Governance

Tables and generalizations, which suggest specific national percentages of support from various funding sources, mask the actual diversity in community college financing and governance. As might be expected, financing and governance are related; the proportion of support from state and local sources has much to do with the degree and character of control.

In the beginning (and in a few cases it is still true), public two-year colleges often were part of the local public school systems which control elementary and secondary education. Recognition of their "higher" education status began in California in 1917 when legislation made possible separate districts for two-year colleges.

Because each state is responsible for its own education systems, the governing and financing of two-year colleges come in an array of methods and combinations of methods. Broadly speaking, the governance and financing of community colleges can be in the hands of the local education system, or the state education system, or the responsibility may be shared by both the local community and the state. The predominant method appears to be some degree of shared governance and support. It is not difficult to conceive of some conflicts between local community and state interests in the colleges.

One of the clearest descriptions of how two-year public colleges are organized and financed is that by M. M. Chambers of Illinois State University, an expert on state financing of higher education:

(1) The *local public community college* is based on a local taxing district, from which it derives "primary" financial support, but also receives state aid. It has its own local governing board but is subject to varying degrees of state central control in different states. The nomenclature is not uniform. Some of these institutions are called "junior colleges," but "junior" tends to fall into disuse. A more recent trend is toward naming them simply "college."

Whatever the name, the general ideal is that of the "comprehensive two-year college," having a liberal arts or college-parallel division, a vocational-technical division, and an adult division. The approach is currently in varying stages in different states and in different localities within states. Another perceptible tendency is for the proportion of state support to increase, and in Minnesota and Washington the former local public junior colleges have become *state* junior colleges. This change is also in process in Colorado.

(2) The *state junior college* does not depend on any local taxing sub-division for operating support, but gets its tax support from the state in a manner comparable to that of other state colleges and universities. It has no local governing board with plenary authority, but sometimes has a local *advisory* board. Governance comes wholly from a central state authority. In some states the county or other local subdivision or combination of subdivisions is expected to provide the site and the initial physical plant as a "starter."

(3) Area *vocational-technical school* is the generalized designation of schools offering occupational and sub-professional courses of two years or less to student bodies composed in increasing proportion of high school graduates and adults above that age. These institutions vary widely in that respect, from those serving largely lower-school dropouts and adults without high school diplomas, to those serving mainly high school graduates; but the trend is generally upward. This circumstance makes it impossible to draw a fine line between high school and higher education. Some 15 states, when asked to report state tax support of higher education, have included substantial sums appropriated to this type of school.

The exact nomenclature is not uniform. It may be simply "technical college" or "vocational-technical school." In Wisconsin, which has one of the oldest and probably one of the best such systems, it is "vocational and adult school." The statewide

system is under the wing of a special state board and executive staff, though Wisconsin has no general state board of education. For many years the schools were based on 60 or more local taxing districts overlapping or coextensive with general public school districts. Recently the number of such districts has been greatly reduced by consolidations.

Nationwide, this type of school generally receives special federal subsidies under the federal vocational education acts. . . .

(4) *University branch campuses* are operated by one or more state universities in many states. They are often called regional campuses or "university centers," or sometimes "community colleges" as in Kentucky. Generally they offer two years beyond high school, with perhaps more emphasis on college-parallel instruction than on the technical side, though some strenuously assert that the aim is to do both.

Local conditions (principally concentrations of population in growing cities) have caused these types of institutions to be developed into four-year degree-granting colleges, as in Indiana and two outstanding instances in Wisconsin.

. . . . their support for annual operating expenses is usually a part of the internal budget askings of the parent university, not reported separately; and the appropriation acts often leave the allocation of appropriated funds to the discretion of the university governing board. . . .

Numerous, vigorous, and growing systems of state university branches are operated in Pennsylvania, Ohio, Kentucky, Wisconsin, and South Carolina, to name some of the leaders. In many other states smaller numbers of this type of institution are serving well.

Coexistence of Different Types in the Same States

". . . . Many states have Type 4 (university two-year branches) in greater or lesser numbers. Probably every state has Type 3 (vocational-technical schools); but apparently in a majority of the states these schools straddle the line between education beyond high school and lower education in such manner as to leave the emphasis on the "lower" side, at least so that they are not locally reported as "higher education." . . .

Types 1 and 2 (above) coexist happily in New York; Types 1, 3, and 4 in Connecticut. Types 1, 3, and 4 are alive and well in Ohio; Types 1 and 4 in Pennsylvania. Types 3 and 4 are strong in Wisconsin; Types 3 and 4 in Kentucky. There are a great many other examples of statewide systems that are not rigidly uniform, but flexibly diversified.

All are agreed that some form of institution for the first two years above high school should be made more generally accessible than is now the case.

(*Gravevine*, Number 173)

In states where community colleges are numerous, there is an increasing tendency to place the colleges under the ultimate control of state boards of education or under separate statewide community college boards. Many large cities or regions with multiple campuses are coordinating them through centrally-administered districts. Such is the case in Los Angeles, St. Louis, Kansas City (Missouri), Chicago, Dallas County, Maricopa County around Phoenix, Arizona, and San Diego.

ROLE OF TWO-YEAR COLLEGES

The roles of two-year colleges are as varied as the educational needs and interests of the several groups they serve: youth, adults, elderly; affluent and underprivileged; employers and employees; mainstream and minorities. Clearly the major goal is the job of educating students toward the best possible opportunities for career achievement and satisfaction.

In addition to career education, these colleges grant liberal arts degrees to hundreds of thousands of students, and also provide a springboard to bachelors' degrees and beyond to students who otherwise might never have considered four years of college. This transfer function of two-year colleges serves to increase the flow of students to four-year colleges and universities.

Accessibility

Community and junior colleges are sometimes called "commuter colleges." This nickname suggests an obvious but highly significant feature of these institutions: their accessibility. It was this aspect particularly which captured the attention of the Carnegie Commission on Higher Education in their report on two-year colleges, *Breaking the Access Barriers: A Profile of Two-Year Colleges.* It should be the goal of this country, the Commission urged, to put higher education within commuting range of every citizen (except of course in areas so thinly populated as to make it unfeasible). If this goal is to be reached, about 230-280 new colleges must be established by 1980.

On the other hand, some two-year college experts, such as John Lombardi of the University of California at Los Angeles, have recommended caution before public authorities commit themselves to make heavy investments in new facilities. The percentage of young people going to college is expected to continue to increase, at least through this decade; however, the number of persons of college-age is pre-

dicted to decrease moderately because most of those born during the post-war baby boom have already passed through college age, and because the rate of population growth is continuing to decrease as a result of the fall in birth rates since 1957. Consequently, the overall growth of college enrollment in the seventies may not require quite as large an expansion in the number of two-year institutions as suggested by the Carnegie Commission.

> *"The goals of the junior college have always been idealistic and an influence for the democratization of higher education. The new urban community colleges grow from this tradition, but they seek to respond to the desperate needs of urban man. In coordination with other institutions of education, community groups, and government, these changing colleges offer hope for the nation's cities."*
>
> *Carnegie Commission on Higher Education*

The accessibility of commuter colleges means more than convenience. It is a small but stunning step from the concept of putting higher education within everyone's reach to the view that everyone in a community is a potential student. Again, as the old boundaries blur away, the term "college student" no longer means only the 18-21 year-old sons and daughters of the rich whose liberal arts and professional training will prepare them for successful careers. It seems assured that the United States is moving toward universal post-secondary education, and that the country is also looking to higher education to solve an increasingly wide range of problems. By locating community colleges within commuting distance, the working adult becomes a potential student, as do women with children, the elderly, the retired, as well as the young for whom moving away from home or from a job is psychologically or financially too big a step.

The most promising aspect of community colleges is this potential to bring education to everyone, to the traditional college student, and to people who in the past found higher education too distant, too foreign, too exclusive, or too expensive. Community colleges are sometimes called democratic colleges because of this goal to make higher education possible and meaningful for all Americans.

> *"We are committed to seeking out potential students, discovering their needs, and devising educational programs to help them, perhaps to overcome educational or motivational deficiencies, perhaps to upgrade their competence in a particular skill.*
>
> *We believe that the large society is also committed to these goals; that there is a growing recognition that in a complex society a year or two of postsecondary training is necessary for almost all Americans; that opportunity for education at this level is approaching definition as a fundamental right for all who seek it; that the cost to society of fulfilling this right is far less than the costs which result from an untrained, unemployable population."*
>
> *Agenda for National Action*
> *Assembly of the American Association of Community and Junior Colleges*

Outreach

Because the old academic offerings and instructional techniques don't work for everyone, community colleges are finding they have to do more than open their doors to everyone expressing an interest in attending. In many cases it becomes apparent that they must go out to meet, encourage, and respond to the needs of their constituencies who have not been served in the past.

> *"In looking at the community college movement, one must keep in mind that this is still something of a pioneering effort. The community college is the final link in the national chain of effort to democratize and universalize opportunity for college training."*
>
> Edmund J. Gleazer, Jr.
> *President*
> *American Association of Community and Junior Colleges*

A mobile van from Orange County Community College in New York drives into near-by Spanish-speaking and black communities with volunteer students to inform residents about the college's offerings and activities. A mobile classroom van of Portland Community College in Oregon reaches economically-depressed families to teach home management, family finance, food selection and use of community resources.

The Servicemen's Opportunity College program, coordinated by AACJC and assisted by the U.S. Department of Defense, provides examples of this "outreach" concept. Participants are a world-wide network of two-year colleges which, in addition to their normal campus programs, make special efforts to meet needs of active-duty servicemen. A type of external degree program is offered along with evening and weekend classes. One of the first community colleges to become involved with this program of educating servicemen was Parkland College in Illinois which "relates" to Chanute Air Force Base nearby. Those involved use the word "relate" to suggest the colleges' commitment to adapt to potential students and their needs.

Fort Steilacoom Community College in the state of Washington administers a special Army program which provides recruits two years of education. Completed work can be applied toward associate degrees in fields like law enforcement, communications, and engineering. The Veterans Administration pays the student costs of the program. Another two-year college, Staten Island Community College, has conducted programs at Fort Dix, New Jersey, and the U.S. Coast Guard Station in Brooklyn.

With cooperation from the American Legion and financial support from Carnegie Corporation, AACJC has helped hundreds of colleges to establish Veterans Outreach Programs, designed to encourage veterans to take advantage of federal funds available to them for continuing their education.

Among the hundreds of colleges attempting to provide higher education to new groups of students is Pasadena City College in California. In over 70 locations—schools, churches, parks—the college brings education to the people, and also uses a mobile unit which visits low-income neighborhoods and provides job counseling and information about the college's offerings.

As a group the elderly are being served in increasing numbers of community colleges. North Hennepin State Junior College in Minnesota has 300 senior citizens enrolled in a special curriculum for those 55 and older. The program, tuition-free because of a federal grant under the Older Americans Act, even includes a course on "Sex over 65."

Prisoners are another special group being served by community college programs. Allegheny Community College in Pennsylvania graduated several prison inmates, one with honors. Included were six life-term inmates. All of the first graduating class are continuing their education at four-year institutions.

Racial minorities, long neglected, excluded, or misunderstood by mainstream higher education, are gaining access to higher education in largest numbers in the community colleges. Community colleges in Hawaii, Alaska and Puerto Rico serve varying ethnic groups. Compton College in Los Angeles County serves a 65% black, 17% Chicano and 7% Thai student body. A mobile van helps recruit students in their own neighborhoods. Student peers tutor those in need of remedial work, and a manpower program trains and places the unemployed in jobs.

> *"In 1970, more than half of all black freshmen were in two-year colleges . . . The increase in institutional accessibility represented by the opening of new urban community colleges is probably the single most important reason for the increase in minority enrollment during the 1960's."*
>
> Fred Crossland
> *The Ford Foundation*

Also in California, Barstow College enrollment is 28% Mexican-American, 12% black, 2-3% Indian and 1-2% Oriental-American. Palo Verde College is 30% Chicano, 10% black and 10% foreign. This relatively large foreign student population can be accounted for in part by the college's policy of no tuition for out-of-state students.

> *"No other segment of American higher education has given anything like the attention and resources the public junior colleges have devoted to the task of healing the wounds caused by deficient and bad education. It has taken courage for these colleges to define their quality by what they can do for students who need help, rather than by what students can bring to them from the competitive market of high achievers."*
>
> *Carnegie Commission on Higher Education*

Educating a predominantly black student body in Chicago, Malcolm X College is something of a success story. From modest beginnings a few years ago it has grown to typify the viable, active central-city community colleges.

Hostos Community College in New York City is named for a Puerto Rican educator. The college's programs, based on a "career ladder" concept, emphasize the health sciences. Hostos serves largely Puerto Rican and black students.

Navajo Community College and the Oglala Sioux Community College and Sinte Gleska College Center are unusual in providing higher education for Indians which is run by Indians. The Indian administration is regarded as highly important in light of the massive poverty and other problems of the first Americans, and of the failure of white-oriented education programs in the past. The Navajo college, which builds on Navajo language and culture, is on reservation land in Arizona. The Sioux college system serves 800 students, including many adults, on adjoining reservations in South Dakota. It utilizes 14 branch campuses located near settlements.

Community colleges are rightfully recognized for their capacity to bring upward mobility and job advancement to new types of students. Included, of course, are the children of blue collar workers and representatives of numerous white, ethnic American groups. In addition, the "traditional" students who benefit from two-year colleges are not being overlooked. Many sons and daughters of the more affluent are receiving liberal arts and career education in community colleges. Educators—and parents—have noticed the recent trend of students normally expected to attend the more prestigious liberal arts colleges to consider other alternatives such as two-year colleges. One reason may be the growing respect of young people for the crafts and the growing interest in more down-to-earth trades. Another reason may be their realization that bachelors', masters' and doctoral degree-holders in some fields have experienced a very tight job market.

> *"These institutions [community colleges] offer not only a second door to the conventional four-year program, they also provide two-year career or occupational programs . . . They are ideally situated to respond to employment trends. Well-managed, this relatively elastic sector of higher education may be as important as any other."*
>
> Albert H. Bowker
> *Chancellor*
> *University of California*
> *Berkeley*

Another group that community colleges assist are experienced engineers, scientists, and technicians whose jobs are being phased out. At Brevard Community College in Florida, out-of-work aerospace technicians were retrained as environmental engineering technologists to fill a need in the emerging environmental protection fields.

Innovation

The increasing and changing surge of new students calls for new teaching concepts. Clearly many of their older brothers and sisters were turned off or turned away by some aspects of traditional education. In teaching career education and liberal arts curricula, two-year colleges are finding success with new teaching methods. A large part of the innovation and experimentation in higher education today is being carried on in the two-year colleges. It is often suggested that the absence of hallowed halls of ivy and of tradition-bound instruction puts two-year colleges ahead of four-year colleges in flexibility and capacity to innovate.

> *"In every section of the country, a significant number of schools and colleges are seeking to reorient and broaden their purposes. Their common goal is to respond to the student's specific, immediate educational needs in a manner that serves his long-term aspirations for a satisfying and meaningful life after his schooling is ended. This is career education, a concept which recognizes that learning is more than an intellectual exercise–that in stretching people's minds and honing their sense of values, the schools and colleges have the further obligation of preparing them to launch successful working careers.*
>
> *Nowhere is this thesis better illustrated than in our community junior colleges."*
>
> Marie Y. Martin
> *Director of Community College Education*
> *U.S. Office of Education*

Mount Vernon Junior College, a privately-supported institution in Washington, D.C., developed a "modular calendar" to replace the semester system. Students can devise their own schedules, completing different numbers of courses in varying periods of time. (Although the calendar system has been in effect since 1968, a foundation recently awarded $250,000 to a four-year college to institute the same

modular scheduling. Mount Vernon's director of fund-raising uses this example to illustrate two-year colleges' problems in gaining recognition; the fund making this grant excludes consideration of two-year colleges.)

Innovation is highly regarded at Brookdale Community College, an "open college" in New Jersey. "Open" refers to many aspects of the school: an open-minded attitude toward new teaching methods, open admissions, open facilities and space with few traditional classroom walls, and open-ended education. Completion schedules depend on the student.

Central Nebraska Technical College teaches career education by "media centers," demonstration films, and learning tapes instead of traditional classroom lectures. Students work at their own speed and can enter the college at any time of year. Vincennes University, a public two-year college in Indiana, owns and operates three cable television entities and a television broadcast station. Coast Community College District in California joins two campuses by a "Communiversity," an educational television channel. Miami-Dade Junior College offers a course shown over a local educational television network.

An unorthodox but creative schedule was developed by Central Piedmont Community College in North Carolina. The college offers instruction literally around the clock and year-round as well. In this way it can serve 8,000 students. Another unusual step was taken by Mountain Empire Community College in Colorado which surveyed local employment prospects and qualifications, and students attitudes—before the college was opened. In addition to providing a good basis for developing the curriculum, the information will serve as a job bank for students.

Kittrell College, a black junior college in North Carolina, has adopted a total "systems approach" to learning and teaching. Instruction is based upon the systematic development and evaluation of modules (or "packages" of instruction) using behavioral objectives as a foundation. The college uses a non-punitive grading system, discourages teaching through lectures, and uses a variety of learning styles and instructional media. Course content is chosen on the basis of its relevance; testing is used to assess teaching; and the student is an active participant in the selection of course objectives, content, and learning experiences.

NON-TRADITIONAL TWO-YEAR COLLEGES

In noting college efforts to develop new teaching concepts, it is essential to mention the colleges which present entirely different institutional forms to serve changing student constituencies and needs. A relatively new institution is the "upper division" college or university which, as the name implies, is a college offering the junior and senior year programs. In some cases they offer graduate studies as well. One of the main functions of upper level colleges is to provide convenient access to baccalaureate education for graduates of two-year colleges—without having to create four-year colleges which would duplicate offerings of existing two-year colleges. According to the Association of Upper Level Colleges and Universities, there are now 24 upper level two-year colleges, operating in all regions of the country.

The movement has taken strong hold in Texas and in Florida where the University of West Florida, Florida Northern University, and Florida Atlantic are operating. In 1972 Florida International University in Miami opened for the first time with 5,500 students. It expects to draw most of its students from graduates of Miami-Dade Junior College. Florida International is also developing a University Without Walls to allow low-income students to design their own programs based on their own learning needs. Miami-Dade Junior College is collaborating in this external degree program which will allow students to complete requirements for the bachelor's degree.

Simon's Rock in Massachusetts is a private four-year college, but it brings together in one institution the last two years of a traditional high school with a college level program. It awards a two-year college's associate degree. This "early college" represents a major movement throughout all levels of education today, that of speeding up the process of acquiring an education.

Deep Springs College, isolated between mountain ranges in California, is a highly selective private two-year college enrolling about 30 students. Students chosen from the top one percent scores of the National Merit Scholarship tests and College Board exams attend tuition-free. Although a third year is possible, most follow a two-year college program, then transfer to a four-year college or university. An unusual aspect of this college is its student-run cattle ranch, dairy, and gardens which serve as campus.

International Community College, a private two-year college with headquarters in Los Angeles, is actually a coordinating group for schools operating in other countries. A core program is based upon seminars on the Great Books, with each school offering distinctive programs in specialized areas—in Denmark, for example, archeology and cinematography. Students participate in community-service projects and civic affairs in the respective countries.

Further indications of the two-year colleges' expanding programs, services and innovations are contained in the following section on funded projects in junior and community colleges.

II. GRANTS AND FUNDED PROJECTS IN TWO-YEAR COLLEGES

> *"The problem obviously is not that the community college lacks general acceptance by the nation–its rapid growth to date indicates its popularity–the serious question is whether, in a period of belt tightening, it will have sufficient public understanding and support to enable it to serve the increasing number of students who heretofore have not continued their education beyond the secondary school and who will be served best by institutions with unconventional functions and practices."*
>
> *Carnegie Commission on Higher Education*

In presenting grants and funded projects in two-year colleges, this section illustrates the diverse functions these institutions can perform. Grants to an institution represent an investment by the donor, and these listings are intended to suggest the variety of benefits coming out of these grants—the products—as well as the number of ways grants can be allocated to colleges.

Although many foundations, corporations, and government funding sources have limited some or all of their support to four-year institutions, this practice is definitely changing. It will change more quickly now that private and public two-year colleges are growing more professional in their fund-raising and other development activities.

Like the public four-year colleges and universities, the public two-year colleges have had to battle a widespread view that these institutions are state-supported and therefore do not require—or deserve—voluntary support. In fact the term "state-assisted" is more accurate, for state and local legislatures, especially in these dry times, provide funds for only the most basic, closely-trimmed budgets. As one report on the financial status of community colleges put it, they are operating just above the poverty level. On the other hand, these colleges are being called upon to provide educational opportunities for booming student bodies, many of whom need counseling, orientation and remedial attention if their enrollment is to mean anything.

As community colleges, the colleges are attempting to respond to and cope with social, cultural, economic as well as educational problems of their various clienteles. This, of course, costs money, as do efforts to coordinate employment needs with college programs, and many other services. To achieve a "margin of excellence," or even to rise above the most elemental educational offerings, additional funds are needed. Although private gifts still represent a relatively small proportion of two-year college revenues, they are significant in quality if not in quantity. It appears that more sources of voluntary support—foundations, corporations, alumni and private individuals—are now recognizing the importance of two-year colleges to the nation and to their communities, and that they will be investing in these institutions' efforts.

> *"I consider the experimental programs here to be the cutting-edges of our entire enterprise. Almost without exception, these efforts are not supported by our regular tax-based budget. Without external public grants and private gifts, the most vital part of the College's development would be thwarted."*
>
> William M. Birenbaum
> *President*
> *Staten Island Community College*

A growing source of funds for two-year colleges will be alumni support. In recent years, two-year college alumni have contributed approximately 10% of their alma maters' total voluntary support, according to Council for Financial Aid to Education surveys.* Although many of the graduates continue their education in other colleges, there are numerous indi-

*CFAE's annual survey, published as *Voluntary Support of Education*, receives more responses from private two-year colleges than is representative of the two-year college field as a whole.

cations that two-year colleges are successfully competing for funds. Bennett College in New York, for example, annually receives about one-half million dollars from alumnae. Private two-year colleges have had somewhat greater success, but it appears that community college graduates are also willing to support their alma maters. During their recent first alumni annual fund campaign, Mercer County Community College in New Jersey was surprised by their alumni's willingness to contribute. Although it takes many years to build up strong private support, community colleges are encouraged by their efforts so far.

FUNDED PROJECTS OF THE AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES

The American Association of Community and Junior Colleges, whose membership consists of both private and public two-year colleges, provides national leadership and representation for the field. As might be expected, the activities and funded programs of AACJC are good indicators of the issues and movements within the two-year college field. For this reason, AACJC's funded projects are listed here separately.

The W. K. Kellogg Foundation has been a strong supporter of two-year colleges and their goals. The Foundation funded "Project Focus," a study of AACJC leadership and operations which resulted in a stronger and more representative organization. Kellogg describes the project as follows:

> The AACJC's 18 month "Project Focus" examined the trends and directions in the community college field and the implications these have for the Association's future objectives, functions, organization, and administration. It probed the views of students, trustees, community leaders, faculty members and administrators, and assessed population and economic trends to better understand the forces influencing the present and future directions of the community college movement.

The adopted recommendations of Project Focus include a more flexible and responsive organization, a larger and more representative board of directors and the addition of the community colleges in the name of the organization.

Kellogg also committed funds for three years to support an international program at AACJC, designed to provide information and assistance to foreign countries which are considering and developing community colleges. As might be expected, the community colleges' capacity to produce trained manpower in technical fields has made this form of education interesting to education and government leaders around the world. Contacts have been made with Brazil, Chile, Columbia, Peru, Venezuela, Jamaica, Canada, Lebanon, Greece, Ethiopia, India, Thailand, the Philippines, Japan and Vietnam. The International Office of AACJC has also worked out a plan with the Association of Canadian Community Colleges for an exchange of faculty, students and staff between the two countries.

For five years Kellogg provided support for an AACJC project to encourage expanded occupational training in two-year colleges. The goal has been to create a national system of technical education in health, public service, and business and industry fields, in response to changing labor patterns.

Kellogg granted $456,250 to help AACJC efforts to induce greater involvement and participation of various groups in the Association's activities. A system of councils was created with representatives of the many concerned groups such as students, faculty, trustees, and various minority groups.

The Danforth Foundation has contributed to the Trustee Council Development and also to a program at AACJC to give assistance to the many new two-year colleges which are just opening.

United States Steel Foundation made a substantial $90,000 grant to AACJC to help attract more minority students—Mexican-Americans, American Indians and Puerto Ricans—into higher education. The program is intended to stimulate awareness of the educational needs of Spanish-speaking and Indian students which can be met by two-year colleges. Leaders of the project are assisting colleges in developing ethnic studies and educational services for students, and are attempting to create better understanding of the contributions of these minorities.

Shell Companies Foundation has contributed to the AACJC report, *An Education a Little Out of the Ordinary*, an illustrated guide to the community and junior colleges. Shell Companies Foundation and the Alfred P. Sloan Foundation have made available planning grants to AACJC.

The Ford Foundation has assisted in support of an Office of Minority Group Affairs at AACJC which has increased the awareness of needs and potentials of

minority students in community colleges. An appropriation of $295,470 from Carnegie Corporation of New York supports an AACJC program for servicemen and veterans. For a number of years AACJC has been attempting to coordinate military training programs and two-year college programs. The grant will continue efforts to make veterans aware of educational benefits available to them under the G. I. Bill.

With a $100,000 grant from the U.S. Office of Education, AACJC will expand its efforts in the field of veterans education. The grant will be used to establish an information clearinghouse and assistance program through which two-year colleges and other colleges are encouraged to develop special programs for veterans.

Exxon (formerly Esso) Education Foundation granted $28,700 to AACJC for an investigation of student personnel programs in two-year colleges, to be conducted by a California State College professor. Guidance and counseling are more broadly available and probably more needed in two-year colleges, but still fall far short of critical student needs.

General support of AACJC activities is also being provided by the following corporations:

General Motors Corporation	$10,000
United States Steel Foundation	10,000
Exxon Education Foundation	7,500
Ford Motor Company Fund	5,000
American Telephone and Telegraph Company	2,500
Koppers Company, Inc.	2,500
Cities Service Company	2,000
Gulf Oil Corporation	2,000
International Business Machines Corporation	2,000

Among past supporters are Olin Corporation, Evaluation Technology Corporation, American Stock Exchange, Sears-Roebuck Foundation, Pren-Hall Foundation, Insurance Institute for Highway Safety, and Automotive Safety Foundation.

The U.S. Department of Justice's Law Enforcement Assistance Administration made a grant to AACJC for a program to help raise the educational level of correction officers in prisons. A $147,492 federal grant helped AACJC initiate a new project dealing with community and junior college programs for the aging. The project prepares personnel for delivering services to the aging and utilizes two-year college resources to provide direct services to the aging. The grant came from the Social and Rehabilitation Service of the Administration on Aging.

The Commonwealth Fund will sponsor an AACJC project designed to stimulate development of community college-university consortia concerned with allied health education. The grant amounts to $63,000. A $20,000 Alfred P. Sloan Foundation contribution will support study of educational technology in two-year colleges.

CORPORATE CONTRIBUTIONS TO TWO-YEAR COLLEGES

Following are examples of business and industry contributions to community and junior colleges. A few instances of corporate involvement can also be found under the headings following this section, in cases where corporations have joined with foundations and government in the support of individual projects.

The Merck Company Foundation has committed $25,000 over a five-year period to Union College which is described as "right in the midst of a major plant community of Merck & Co., Inc." The grant is toward a Library/Classroom Building Fund.

Continental Bank Charitable Foundation in Chicago is a strong supporter of Central YMCA Community College. Their gift of $10,000 ". . . did indeed represent a departure from long-standing policy. However, in the last few years more and more two-year institutions have sought our consideration and in each instance a most compelling case was made." Central YMCA's success in "reclaiming and rerouting" school drop-outs into skilled graduates has attracted the attention of a number of corporations. The college lists a total of $102,400, 1971-72 support from:

Alexander & Alexander, Inc.
American National Bank & Trust Company of Chicago
Jim Beam Distillers
A. G. Becker & Co., Inc.
Carson Pirie Scott & Co.
Chicago Bridge & Iron Co.
Chicago Title & Trust
Commonwealth Edison Co.
Continental Illinois National Bank & Trust Co. of Chicago
Ernst & Ernst
The First National Bank of Chicago
General American Transportation Corp.
Harris Trust and Savings Bank
Hartford Insurance Groups
Inland Steel Company
Fred S. James & Co.
Kraft Foods
Marsh & McLennan, Inc.
The Northern Trust Co.

Peoples Gas Light & Coke
The Prudential Insurance Co. of America
Sears, Roebuck and Co.
Signode Corp.
Trans Union Corp.
Zenith Radio Corp.

Officers of the college believe that contributions from their corporate supporters represent a fight against urban deterioration and a concern for expanding opportunity.

Continental Bank also sponsors a Student Achievement Recognition Program, described as follows:

> This program was started in 1969 to focus public attention on Illinois Junior and Community Colleges by recognizing individual student accomplishment. One man and one woman from each participating two-year campus are honored annually on the basis of outstanding achievement. Local winners compete in district judgings, and two winners (a man and a woman) from each district compete for the state awards. Cash awards are presented to winners at all three levels of judging. The bank administers the program, pays all expenses, and gives $9,200 in awards each year.

Aetna Life & Casualty has made grants of $1,000 each to the following two-year colleges:

Wayne County Community College, Detroit, Mich.
Cuyahoga Community College, Cleveland, Ohio
Gr. Hartford Community College, Hartford, Conn.
El Centro College, Dallas, Texas
Forest Park Community College, St. Louis, Mo.
Seattle Central Community College, Seattle, Wash.
South Texas Junior College, Houston, Texas
City College of San Francisco, San Francisco, Calif.
Malcom X College, Chicago, Illinois
Middlesex Community College, Middletown, Conn.

In each case the funds are used as scholarship aid to disadvantaged or minority students chosen by the college.

Sears-Roebuck Foundation helped the American Association of Community and Junior Colleges produce "The NOW Colleges," a 28-minute documentary film on two-year colleges which the Foundation sends out loan-free. Two-year colleges are eligible for the Foundation's annual college library and unrestricted grants programs.

The Prudential Insurance Company of America prepared and makes available a booklet, *Facing Facts about the Two-Year College*, a guide for high school students, their parents and school counselors.

A glass technology program at Corning Community College, New York, was made possible by a $21,000 grant from the Corning Glass Works Foundation.

The Fashion Institute of Technology in New York City receives substantial support from the fashion and fashion-related industries who employ F.I.T. graduates. The Educational Foundation for the Fashion Industries is the fund-raising and fund-receiving arm which solicits voluntary support. Contributions are used for badly-needed scholarships, research and development—areas not financed by state and city funding. Recently The Wool Bureau established a teaching chair at the college with a contribution of $100,000 over a five-year period. The Embroidery Manufacturers Promotion Board made a $50,000 contribution, also over five years. Honor scholarships have been established by organizations such as Conde Nast Publications, Inc., Bloomingdale Store Foundation, American Printed Fabrics Council, Inc., Bankers Trust Co., Fairchild Publications, Montgomery Ward & Co., Incorporated, Warnaco, Inc., Singer Company Foundation, and Allied Stores Foundation, Inc. F.I.T. also receives equipment for classroom use, donated by many corporations.

> *"Serious doubts can be raised about the viability of the community college as a democratizing agent unless means can be found to assist needy students to take advantage of it."*
>
> *Carnegie Commission on Higher Education*

Olin Corporation Charitable Trust has contributed for three years to a community college scholarship program to enable community college graduates to transfer to a four-year institution. Olin also contributed to Citizens Scholarship Foundation of America which provides scholarships for vocational education in two-year colleges and elsewhere. Scholarship recipients are "average" students from disadvantaged backgrounds. Olin contributes as well to the Virginia College Fund, an association of private junior colleges. In five years of fund-raising, the association raised over $500,000 from 330 firms.

Beginning in 1972, Eastman Kodak Company extended its Educational Aid Program to include two-year colleges. Fifty-two of these institutions received a total of $100,000 in direct grants.

Dow Chemical U.S.A. states it has:

> . . . had scholarships in Michigan community colleges for science or engineering restricted to

graduates of high schools in the area of the community college designed to help the community college publicize its programs of science and engineering and to attract out-standing students from the area to go to the community college. Some scholarships have been established at four-year institutions restricted to graduates of community colleges to help "sell" the idea of continuing at the state-supported institution in their state.

Although Dow's matching grant program has been restricted to four-year institutions, the Contributions Committee has taken special action in approving contributions to community colleges in Dow locations. Delta College in Michigan and two-year colleges in Connecticut, Georgia and Texas have benefited from these grants. Dow also contributes building materials in lieu of cash to community colleges and surplus equipment has been given to several colleges.

Exxon Education Foundation made grants totaling over $50,000 to a Vietnam veterans program of Staten Island Community College. The program has increased the number of veterans attending the college and broadened services to them. Exxon also granted $66,700 to North Shore Community College in Massachusetts to adapt the United Science Study program to the two-year college.

A small college which is helping bring new strength to the depressed Appalachia area is being assisted by several corporations. Although annual family income of students at Alice Lloyd College averages only $3,900, this college in eastern Kentucky can boast that most of the region's doctors, engineers, attorneys, teachers, public officials and businessmen got their start at the college. National Steel Foundation has pledged $30,000 to the school and the Pease Lumber Company donated the college president's home, valued at $30,000. Avon Products Foundation gave Alice Lloyd $20,000, and grants of $5,000 each came from Exxon Education Foundation, American Electric Power (Kentucky Power Company), Gulf Oil Foundation, and Western Electric Fund. Other corporate contributors to the college are Reader's Digest Foundation, Thacker Grigsby Telephone Company, Sears-Roebuck, Borg-Warner, Upjohn Corporation and Equitable Life Assurance. Among the programs these grants support are Community Service in Rural Appalachia and the Oral History Program. IBM's contribution is Bob Warner, an employee loaned to the college under the company's Faculty Loan Program.

Shell Companies Foundation, in the past two years has contributed to Alabama Christian College, Jacksonville College in Texas, Judson Baptist College in Oregon, Kittrell College in North Carolina, Post Junior College in Connecticut and Nairobi College, California, all two-year colleges. Nairobi, in East Palo Alto, also received a $20,000 grant from Cummins Engine Foundation to help launch the college. It is a new community college which grew out of the minority community's desire for a truly responsive and local institution of higher education.

Teledyne, Inc. is a contributor to GOAL (Guaranteed Opportunity Achievement Loans). This loan program, underwritten by the California business community, permits selected students to pursue career education in community and junior colleges. According to Teledyne, "The program is financed through contributions which support loans made by the Bank of America to needy students selected by the Financial Aid Officers of the participating colleges. A 20% incentive bonus is also contributed and is paid to the students when the loans are repaid in full."

Burlington Industries Foundation contributed $1,750 to Chowan College in North Carolina. Other corporate supporters of the school are J.P. Stevens & Co., Inc. Foundation ($1,000), Sears-Roebuck Foundation ($1,000), Georgia-Pacific Foundation ($1,000), Revelle Companies ($7,176), Maola Milk & Ice Cream Co. ($2,475), Carolina Telephone & Telegraph Co. ($2,500), Revelle Investment Corporation ($5,464), and Chowan Veneer Corporation ($4,000).

Sperry Rand Corporation, Long Island Lighting Company, Roosevelt Raceway and Security National Bank have contributed to Nassau Community College on Long Island. Wesley College, Dover, Delaware, is the recipient of grants from Sears-Roebuck, International Playtex Corp., J. C. Penney Company, Inc., General Foods Corporation, Hercules Incorporated, and Delaware Power & Light Company. Numerous local firms also provide grants of $500 and less each year.

Evaluation Technology Corporation made a grant of nearly $2,000 to the Junior College District of St. Louis-St. Louis County. The contribution supported a program called "Neighborhood youth corps goes to college." The District also received grants of $4,285 and $2,000 in succeeding years from National Restaurant Foundation for a student internship program in hotels, motels and restaurants.

Several corporations have contributed to the curriculum center endowment of Wentworth Institute in Massachusetts. USM Corporation gave $3,000, New

England Mutual Life Insurance Company, and Riley Stoker Corporation gave $1,000 each. American Mutual Insurance Co. of Boston, Jackson & Moreland International, Inc., and Symmons Industries, Inc. also made contributions.

The Afro-American Studies Program at Kendall College, Illinois, has attracted corporate support. Oscar Meyer Foundation made contributions of $3,500 and $3,000 in succeeding years, Bell & Howell Foundation gave $1,000 for three years, and Sears-Roebuck Foundation granted $3,000. The Allstate Foundation gave $1,000 and the American Hospital Supply Corporation, $500.

Chase Manhattan Bank contributed $1,000 to Bronx Community College for a program improving water safety skills of economically-deprived youths.

International Business Machines Corporation is a supporter of the Technical Education Consortium, Inc., and has also contributed to the Texas Private Junior College Foundation and the Virginia College Fund. Two-year colleges in the neighborhood of principal IBM plants sometimes receive small grants, primarily for support of minority students.

Pennsylvania Power and Light Company offers four full-cost scholarships, including tuition, books, and enrichment programs, to minority students in the electrical engineering program at Harrisburg Area Community College.

National Bank of Detroit provided a community college with $5,000 for an interest-free revolving loan fund for returning veterans.

Connecticut General Insurance Corporation contributed $30,000 over four years to The Hartford College for Women for their capital fund drive.

A number of businesses are assisting Staten Island Community College with an internship program in which students are required to serve as interns one day a week in connection with their field of study. Among the involved companies are Consolidated Edison Co. of New York, Inc., Community National Bank & Trust Co. of N.Y., and the American Broadcasting Company. Suggesting a general upward trend in support of two-year colleges, Staten Island has raised its level of gifts and grants from $70,000 in 1967-68 to $500,000 in 1972-73.

Kansas-Nebraska Natural Gas Company has contracted with Central Nebraska Technical College to train company employees in intensive, short-term courses which will bring them up-to-date on new techniques and processes in their field.

> *"Industrial training for new divisions of companies is very expensive. Industries are beginning to look to community colleges to do the training for them. This is an example of a community college filling a community need. We're helping the company and also helping the local people to raise their income level. Now new companies thinking about moving into our area are contacting the school first."*
>
> Stephen J. Betze
> *Dean of Instruction*
> *Delaware Technical & Community College*

Numerous other corporations support two-year colleges through matching employee gifts, unrestricted grants, grants to colleges near corporate branches and contributions of equipment; among such contributors are The Mead Corporation, Cities Service Foundation, Kimberly-Clark Foundation, Inc., The General Electric Foundation, John Deere Foundation and Metropolitan Life Insurance Company. Thousands of other local and national businesses assist these colleges. As recognition grows of the close ties between career education and industry, it can safely be assumed that the number of donors and the level of giving will increase.

FOUNDATION GRANTS TO TWO-YEAR COLLEGES

Foundation grants to the two-year colleges are likely, more than corporate contributions, to be directed toward specific projects and goals. In its support of the community and junior colleges, the W. K. Kellogg Foundation has been among the most purposeful foundation donors. It has made grants to strengthen the two-year college movement nationally, through the American Association of Community and Junior Colleges, and to develop specific programs and aspects of the two-year colleges.

Beginning in 1960, the Foundation made a series of grants to twelve universities to train leaders for community colleges. Each of the twelve universities established centers to increase the number of qualified community college administrators by offering masters' or doctoral degrees in the field. The centers

also conducted inservice training for community college administrators. A $204,500 grant to the University of Alberta will develop a program for graduate and inservice education of Canadian community college administrators.

According to Kellogg:

> Since 1963, the Foundation has premised numerous grants on a conviction that more and better qualified technicians comprise the chief answers to the nation's manpower supply dilemma. Foundation support has been given not only to encouraging the growth of a variety of semi-professional two-year curricula programs, especially in the health fields, but, in an effort to provide qualified instructors for these programs, teacher training and preparation has been an important element.

The Foundation responded to the acute shortage of nurses by encouraging the growth of Associate Degrees in Nursing programs in two-year colleges and the preparation of their teachers.

Adjacent to the Foundation's offices is Kellogg Community College which has been aided substantially by the Foundation. A five-year grant to the college provides for a demonstration project directed at meeting the nation's health manpower needs. Educational programs for eight health technology careers are offered.

To develop programs of community service and continuing education, Kellogg made grants to the following Michigan colleges: Lake Michigan College ($173,320), Montcalm Community College ($96,898), and Oakland Community College ($144,456). The grants support the institutions' work with numerous community groups—Mexican-Americans, rural and inner-city residents, drop-outs and others.

Battelle Memorial Institute received a $391,000 Kellogg grant to develop an educational management model and test its effectiveness for community colleges. The model will be implemented through workshops and conferences.

Carnegie Corporation of New York is another foundation which has demonstrated an interest in the two-year colleges and their potentials. Two grants totaling $265,000 went to the Southern Regional Education Board to study of the role of community colleges in meeting the needs of black students. The project has resulted in three publications: *New Challenges to the Junior Colleges: Their Role in Expanding Opportunity for Negroes, The Black Community and the Community College*, and *Impact: A Project Report on Compensatory Instruction in Community Colleges.*

The foundation made a recent $295,470 grant to the American Association of Community and Junior Colleges to continue their work with veterans, initiated by an earlier Carnegie grant. La Guardia Community College received $95,116 to develop a "middle college" combining three years of high school and two years of post-secondary education.

Carnegie granted $290,000 to the Educational Testing Service to develop a computer-based guidance system for two-year college students. The computer guidance is believed necessary because of predicted doubled enrollment by 1980 and a shortage of qualified counselors.

Another Carnegie Corporation grant of $98,880 went to the Vermont Regional Community College Commission. The funds will be used to establish new staff positions for a centrally-administered non-campus system of higher education which concentrates on vocational education.

The community-based black college, Nairobi College, received $15,000 from Carnegie to study how various school financing methods in California will affect minorities and urban and rural poor.

Several grants from the Ford Foundation have gone to two-year colleges serving minority students. Oglala Sioux Community College and Sinte Gleska College Center in South Dakota received a $78,450 Ford grant. The funds are being used to establish a central library and to explore ways to best serve the widely-scattered branch campuses of the college.

Through a $160,000 grant to Navajo Community College, Ford assists the college's program to help reservation Indians improve their ranges and livestock and learn modern marketing practices. Ford also gave $275,000 to the college for a national Indian Leadership Training Program.

A major Ford grant, $2.1 million, went to the College Entrance Examination Board to administer a scholarship program for minority graduates of two-year colleges. Eligible are blacks, Mexican-Americans, Puerto Ricans and American Indians who wish to continue their studies at four-year institutions. Ford notes that "Community colleges and other two-year

institutions enroll a growing proportion of low-income minority students—perhaps as many as half of the 1971 freshmen—but senior colleges are generally more expensive and scholarships for transfer students are limited."

In recent years Ford has made significant grants to AACJC and to the Junior College District of St. Louis. A 1972 grant of $86,311 went to Colorado Mountain College for a program which retrains rural teachers. The community college will work with nine surrounding school districts to identify retraining needs and to organize programs to help teachers become more effective.

The Danforth Foundation recently established a Danforth Community College Institute in recognition of the rapidly expanding community college field. The Institute seeks to assist two-year colleges to serve more effectively the diverse and growing needs of their local constituencies. Each year the Foundation invites twenty community colleges to send a team of representatives to the Institute to make an intensive study of ways that teaching and learning in these schools can be enhanced.

Danforth also made a $20,000 grant to the Junior College District of St. Louis-St. Louis County for Project Go-Ahead to bring low-income inner city youth into area colleges. A $10,000 grant to Bootheel Regional Planning Commission in Missouri enables that organization to study how a "community college without walls" could serve the needs of rural people.

The Alfred P. Sloan Foundation awarded $14,000 to the Junior College District of St. Louis-St. Louis County to study the uses of technology in teaching English in college. The study will be conducted at Florissant Valley Community College.

Two community colleges have received support from the Cleveland Foundation. Cuyahoga Community College received $39,105 to initiate education counseling services in the college, $22,000 for an ethnic heritage center, and a third grant of $10,638. Lakeland Community College in Ohio received a $20,000 grant from the Cleveland Foundation for a cooperative work-study program for its students.

The Joseph P. Kennedy Foundation gave Navajo Community College $76,000 to establish the nation's first center to train Indians to work with mentally retarded children.

Two Vietnamese educators, who will serve as the presidents of the first two community colleges in South Vietnam, studied the administration and curricular structure of American community colleges on a visit supported by the Asia Foundation.

"The Greening of Rural America" is a phrase which the Rockefeller Foundation applies to the activities of one of its major grantees, the College of the Albemarle. From Elizabeth City, North Carolina the college conducts programs for the rural poor, assisted by Rockefeller funds. The first $90,000 from the Foundation snowballed into nearly $1 million when state, regional and federal matching fund requirements were met. The Foundation has made grants totaling $640,000 to the college which is "greening" the surrounding area through economic and cultural development projects. Three recruiters travel back roads encouraging people who have never considered college to attend. Career training and job placement are offered as well as academic education. Since there is no public transportation in the town, three buses, made possible by the grant, bring students from nearby and not-so-nearby. Twenty thousand dollars a year for three years is pledged to financial aid for students.

Rockefeller Foundation has also contributed $110,000 to six colleges in Appalachia for involving students in community development; $45,000 to Monroe County College, Michigan, for training of environmental technicians; and $45,000 to Navajo Community College for its development office.

In North Carolina, the Z. Smith Reynolds Foundation has been supporting two-year colleges, both private and public, in its home state. Chowan College received $25,000 towards construction of a science-engineering building. Forsyth Technical Institute was granted $100,000 to help incorporate nursing education into its curriculum, and Durham Technical Institute used a $12,000 grant to help finance a health-science instructional program in the practical nursing curriculum. Montreat-Anderson College received $10,000 for general purposes, and Peace College was given $30,000 for faculty improvement. Grants of $50,000 each were made to Lees-McRae College and St. Mary's Junior College for construction purposes and for unrestricted endowment. Wingate College also received a construction grant for $15,000 from the Reynolds Foundation, and Louisburgh College used a $15,000 grant for a faculty enrichment program.

In South Carolina the Spartanburg Foundation has supported the local two-year college, Spartanburg Junior College, with a $10,000 grant.

Mary Reynolds Babcock Foundation has assisted its local Forsyth Technical Institute several times in recent years, supporting programs in the trades, with preference being given to black applicants. The Foundation made a $10,000 grant to Northwest North Carolina Development Association for professional films to be used by community colleges and technical institutes. The Foundation's executive director states that "We have not assisted any community colleges yet, but I would not be surprised if we did sometime."

In Nevada the Max. C. Fleischmann Foundation has made grants to community colleges. A $100,000 grant went to Clark County Community College in Las Vegas for a learning resources center. The same amount for the same purpose was granted to Western Nevada Community College, Carson City.

Navajo Community College received a $25,000 grant from the William H. Donner Foundation. The funds support the Inquiry Circle Program which assists Indian students and improves learning skills. Donner gave $20,000 to Haskell Indian Junior College in Kansas to develop library resources at the college. Oglala Sioux Community College, Inc. has also been assisted by the Foundation with $5,000 in "crisis funds" to enable the college to continue its development.

Another of the community trust foundations, the Kalamazoo Foundation, supports local Kalamazoo Valley Community College. A $15,000 contribution to the college's Total Package Program helps students whose academic and socio-economic backgrounds would not normally direct them to the college. Students enrolled in the college's Education Opportunity Program are assisted by $25,000 in scholarship aid, donated by the Foundation. The college also received $17,500 for a special education project.

The Winston-Salem Foundation, North Carolina, has made two grants to Forsyth Technical Institute: $2,592 for a self-study and $36,000 to initiate an associate degree in nursing and to establish curricula for other health manpower programs. Forsyth also received $10,000 from the Metropolitan Foundation of Atlanta.

On the West Coast the San Francisco Foundation distributed $2,000 to Cogswell Polytechnical College and $32,525 to Bayview-Hunters Community College for employment of additional staff.

When it was decided that Genessee Community College in Michigan should extend its continuing adult education programs district-wide, several different resources joined together to make it possible. A building formerly occupied by Sears, Roebuck and Company and valued at $2.5 million was donated by a local philanthropist to serve as a center. The considerable renovation costs were shared by DeWaters Charitable Trust Fund which contributed $450,000, the Charles Steward Mott Foundation with $150,000, and $375,000 from the State of Michigan.

Nassau Community College in New York has received three grants from the Levitt Foundation, all for "Project Opportunity." The total of over $60,000 is being used to make possible a college education to those who would otherwise not have such a chance.

New York's Field Foundation gave $10,000 toward support of the academic program of Nairobi College in California. The Foundation has also given substantial assistance to Mary Holmes College, a black two-year institution in Mississippi. A $12,000 grant went to support the college's health services and paramedical training programs; $15,000 was for the surrounding county's Community Development Program. Over a period of time, grants of $100,000, $150,000 and $125,000 have supported Mississippi Institute for Early Childhood Education Program, an academic extension of the college. The Institute is a training program for Head Start teachers which combines basic education courses and on-the-job experience leading to an associate in arts degree. The Carnegie Corporation of New York has also contributed to this program at Mary Holmes in the amount of $48,500. This grant is to enable the Institute to establish a library of resource materials on child development for use by the faculty, trainees and community residents.

Wesley College in Delaware has received major foundation support for construction of a college center: $1 million from the Longwood Foundation, $160,000 from Crystal Trust, $40,000 from Copeland Andelot Foundation. Other foundations making grants to Wesley for scholarships or unrestricted purposes are Ederic Foundation, Delaware Foundation, Grover Hermann Foundation and The Marmot Foundation.

Sinte Gleska College Center, administered by Sioux Indians, has also received several foundation grants. In addition to those mentioned earlier from Ford and

Donner, the College has received funds from the Jessie Smith Noyes Foundation for a work-study and scholarship program and from the Edward Elliott Foundation and the Tad Beck Fund.

Alice Lloyd College in Kentucky has received very substantial foundation support, including $150,000 from the Louis Calder Foundation, $250,000 from the Bruner Foundation and $400,000 from the Grover Hermann Foundation. A grant of $10,000 came from the Kettering Family Foundation, $30,000 from the Kettering Fund and $80,000 from the E.O. Robinson Mountain Fund. Other foundation supporters include The Johnson Foundation, Schmidlapp Trust, Lila A. Lilly Foundation, Danforth Foundation, Louise and David Ingalls Foundation, Given Foundation, Benedum Foundation, and others.

In Boston, Wentworth Institute has attracted support from several foundations for an evening adult education program for disadvantaged men. Contributors are the Charles Hayden Foundation, $20,000; Frederick Kennedy Foundation, $20,000; Agnes Lindsay Trust, $7,500; and Godfrey Hyams Trust, $5,000. The Williston Trust gave Wentworth $15,000 for a symposium on technical education for New England colleges. Hopedale Foundation made a grant of $3,000 for endowment of the curriculum center.

Among the numerous other foundation grants to two-year colleges are the following:

- St. Mary's Junior College, Minnesota, $79,000 from the Louis W. and Maud Hill Family Foundation for further development of an education program in health services for the disadvantaged.
- A grant of $100,000 to Union College, New Jersey, for a library-learning center from the Lillia Babbitt Hyde Foundation.
- Central YMCA Community College, Illinois, $57,000 for the capital fund from the Grover Hermann Foundation.
- Jessie Smith Noyes Foundation, $22,720 to Bronx Community College for scholarship aid to minority group employees' education for mental institution work.
- Florida Junior College, $20,500 from Educational Facilities Laboratory to study development of air-inflated structures for campuses.
- Almost $2 million from the Kresge Foundation to Wayne County Community College, Detroit, to purchase new administration and classroom facilities.
- Colby Junior College, New Hampshire, $20,000 general support from the Buffalo Foundation.
- Lakeland Community College, Ohio, $20,000 from Fenn Educational Foundation to develop a co-op (work-study) program.
- Columbus Foundation, $15,000 to Columbus Technical Institute for a two-year nursing education program.
- Robert Wood Johnson Foundation, $10,000 to Middlesex County College, New Jersey, for nursing education.
- Cuyahoga Community College, Ohio, $10,000 from the George Gund Foundation for a revolving student loan fund.
- Schreiner Junior College, Texas, $50,000 from the Moody Foundation for a student scholarship fund.
- Kendall College, Illinois, grants of $35,088 and $15,870 for Human Potential Seminars for students and faculty, designed to help participants recognize and use their potentials.
- Also, three grants to Kendall College from the Bowman C. Lingle Trust for Community Service Institutes, enabling students to work in the field with social and community agencies.

GOVERNMENT FUNDING OF TWO-YEAR COLLEGES

Federal Funds

Most federal funds reaching two-year colleges result from two fundamental government interests: that of making higher education more widely available through financial assistance to students, and that of encouraging vocational or career education. However the number of sources for government grants to two-year colleges suggests the variety of functions the colleges perform. Among the sources are the National Science Foundation, the Bureau of Indian Affairs, the Department of Justice, the U.S. Public Health Service, the Veterans Administration, the Environmental Protection Agency, the Department of Housing and Urban Development, the Department of Agriculture, the Department of Labor, the Office of Economic Opportunity, and, of course, the Office of Education.

An indication of the growing importance of two-year colleges is the recent creation of an Office for Community Colleges in the Bureau of Higher Education of the Office of Education. Its responsibilities include determining the sources of government funds available to two-year colleges and recommending, if necessary, legislation to encourage equitable distribution of higher education funding to two-year colleges. Leaders of these institutions believe that their share of government funds to higher education has been too small in proportion to the number of students they educate.

Some legislation now contains provisions requiring that a certain percentage of funds be set aside for two-year colleges. For example the Office of Education, in administering the Higher Education Facilities Act, designated that 34% of available funds be set aside for community and junior colleges in 1969, and 56% in 1970. (Normally the two-year college percentage is not this large, however.) In 1971 the Higher Education Facilities Act put $40.8 million into two-year college construction, rehabilitation, and facilities improvement.

In addition to the Higher Education Facilities Act, the Bureau of Higher Education, (Department of Health, Education and Welfare), administers a number of programs which in the past have channeled funds into the two-year colleges. The Higher Education Act of 1965 (with 1968 Amendments to the Act) offers Educational Opportunity Grants and College Work Study funds. These two programs, along with the National Defense Student Loans (available under the National Defense Education Act of 1958) had approximately $72 million earmarked in fiscal 1971 for 183,000 community college students. As the Office of Education has described them:

> Educational Opportunity Grants enable academically qualified high school graduates of exceptional financial need to attend college. College Work Study grants make part-time employment possible for postsecondary students—particularly those from low-income families—who need extra money to pursue their studies. The NDEA loan program places funds with post-secondary institutions for making low-interest loans to students.

The Administration proposes to rely heavily on new Basic Opportunity Grants to students, beginning with the 1974 fiscal year; however at this point it is not clear to what extent they will be funded.

The Guaranteed Student Loan Program insures low-interest loans to students, made by banks and other lending institutions. A few community colleges have received funds under the Upward Bound Program and Talent Search which encourage low-income high school students to attend college. Under Title III of the Higher Education Act, both public and private two-year colleges have received federal funds to "strengthen developing institutions." In 1971, $7.8 million reached 59 two-year colleges under this program in an attempt to strengthen academic, student and faculty service programs.

Part E of the Education Professions Development Act has been of special interest to two-year colleges. Programs sponsored by this Act provide funds to train teachers and administrators serving in or preparing to serve in community colleges.

As might be expected, two-year colleges do receive federal funding aimed at furthering vocational education, although the distribution of funds varies from state to state. In some cases, vocational education funds are directed largely to secondary schools.

Recognition of the need for more trained personnel in the allied health professions has brought increased federal spending in this field, some of which reaches the two-year colleges. Some funding has come from the Nurse Training Act, the Allied Health Professions Act, Mental Health Education Funding, and the Vocational Education Act, although two-year colleges believe they deserve a larger share of the pie.

As this publication is being completed, the Nixon Administration has not yet indicated to what extent it will free up funds for higher education in 1973 and 1974. Current operating funds have been made available through a resolution to continue certain programs at the same level of funding as last year and through an Urgent Supplemental Appropriations Act. Included under these two measures were some direct student loans, some veterans education funds, and "developing institutions" support. Although indications are that federal education spending will be reduced in the coming year, community college leaders are interested particularly in budgets for those sections of the Education Amendments of 1972 which will affect them most. For example, Title X of the Higher Education Act, as amended by the 1972 Educational Amendments, provides for a program of community college and occupational education planning and development. The extent to which this and other programs will be funded remains to be seen.

Federally-Funded Projects

Following is a listing of some projects in two-year colleges funded from federal sources. It represents only a few of the government-assisted programs under way, but will suggest the range of these programs.

The Junior College District of St. Louis-St. Louis County has received a number of federal grants for projects in its area community colleges. The U.S. Department of Labor provided $1,238,250 for a project to train health aides for neighborhood health agencies. It also gave $34,815 to train operating room technicians, and $3,000 for a program to upgrade

skills of waste paper plant treatment operators in suburban St. Louis.

The Office of Education granted the District $135,000 for Project CIRCLE, a three year program designed to identify the information/education needs of people not being served by a publicly-supported institution in the Florissant Valley area. The project staff will also identify existing institutions and community resources and determine what constraints exist on their access and use. They will then create a model to meet the needs of those not being served.

Another Office of Education-sponsored program, Project VECTOR, helps the District recruit disadvantaged Vietnam veterans and facilitate their entry into the two-year colleges. Two small Office of Education grants permit the District to develop a radiologic technology curriculum and to institute a new method of teaching English composition. An $8,510 grant sponsors an investigation of relationships of social characteristics, attitudes and political behavior of inner-city community college students.

The National Science Foundation has funded a three-year project in St. Louis involving the design, production, classroom testing, and evaluation of ten modules of instruction for technical physics. The U.S. Public and Health Service made a $21,429 grant to develop inter-related curriculum for dental auxiliary training in the St. Louis District. A small grant from the Department of Agriculture provides funds for a food program for students in the National Summer Youth Sports Program.

A community college with the size and faculty resources of Miami-Dade Junior College receives government assistance for a variety of programs. The Office of Education has funded a National Training Program in Environmental Education for Community College Faculty for $137,900. The program will train teachers to teach a general education interdisciplinary course in environmental education at the freshman level. It is designed to serve as a model training workshop to be replicated in the nine other federally-designated regions of the country.

The Office of Education has recently funded two other significant projects at Miami-Dade. A Talent Search project will help 320 Model Neighborhood students to find realistic vocational choices and will encourage secondary school and college dropouts to re-enter and complete education programs. Funds for this program amount to $35,500. A $29,800 grant supports a program to strengthen the international dimensions of general education at the undergraduate level. A consortium of community colleges, formed by the American Association of Community and Junior Colleges with Miami-Dade in the leading role, cooperatively will develop international case studies for general education courses.

> *"The largest percentage increase in federal grants to higher education . . . is in grants for vocational-technical and continuing education, which is 21 times as great in 1973 as in 1963. This support reflects the widely held view that more students should be prepared for useful employment before terminating their formal education."*
>
> W. Vance Grant
> *National Center for Educational Statistics*

The Environmental Protection Agency has also funded programs at Miami-Dade. Grants of $20,000 and $45,723 support programs responding to a shortage of sub-professional manpower in the field of water pollution control. The projects involve training waste water and water treatment plant operators coupled with on-the-job training. EPA funds will also be used to recruit, select and train 20 Spanish-speaking persons in a multidisciplinary program.

Grants from the U.S. Public Health Service will improve Miami-Dade programs in the health fields. A $116,241 project permits the addition of community health theory and practice into associate degree nursing programs. The optometric technician curriculum is upgraded through a $53,423 grant. A $16,492 grant supports basic improvement in the preparation of inhalation therapy technicians and medical laboratory technicians.

Among other federal grants to Miami-Dade are a major Veterans Administration grant and one from the National Science Foundation. The $231,500 in VA funds are used for curriculum development in a community organization training health service personnel. NSF support permits scientific research on amphibians and reptiles of Hispaniola, the West Indies.

Support from the Bureau of Indian Affairs has assisted Sinte Gleska College Center on South Dakota Sioux reservations. Grants ranging from $22,500 to $229,000 have been used to help the col-

lege reach its dispersed, rural population; to develop adult basic education and community education programs; and to implement programs in agriculture, natural resources and youth development. The Indian Health Service made a $25,000 grant to develop a registered nursing degree program, and the Office of Economic Opportunity put $55,000 into the creation of vocational education programs.

Wesley College, a private institution in Delaware, receives numerous operational grants for programs in nursing, biology, and secretarial training. Under the Education Professions Development Act the college was granted $50,000 in the 1971-72 year, and $45,000 in 1972-73. Another private two-year college, Wentworth Institute in Massachusetts, received a National Institutes of Health grant for $77,000 to develop an auto-tutorial center for allied health programs. A third non-public college, Ferrum College in Virginia, received $9,980 under the Environmental Education Act for a program to educate youth and public school teachers in environmental education.

In Massachusetts an experimental Store Front College has been opened by Greenfield Community College, supported by funds received under the Higher Education Act of 1965. In an effort to improve community resources around the Store Front College, it offers short-term courses and workshops free to the public.

CHESS (the Consortium of Higher Education for Special Students) is a federally-funded, inter-institutional agency made up of Des Moines Area Community College, Grand View College and Drake University. With a $110,000 grant, the cooperative arrangement is providing educational and counseling services to physically and economically handicapped students in the Des Moines, Iowa area.

In Maryland the Charles County Community College received National Science Foundation funds to develop a two-year curriculum in estuarine resource technology. Estuarine research aides are trained in pollution abatement programs in the classroom, in a mobile biochemical laboratory and in boats. The boats are equipped with two-way radios donated by General Electric.

The federal government made possible a science center for study of the natural sciences and mathematics at a private women's college, Bennett College in New York. The $1,567 was distributed under the Higher Education Facilities Act of 1963.

Tompkins-Cortland Community College in New York was awarded $22,000 from the U.S. Civil Service Commission to train local government personnel. New York City Community College is training government and industrial officials who will be enforcing new noise abatement codes.

A unique program with combined federal, state and industry sponsorship has been undertaken in Delaware. The "Del Mod" (Delaware Model: a Systems Approach to Science Education) seeks to develop improved science courses for students and to upgrade qualifications of teachers and to improve teaching techniques. The National Science Foundation, E.I. duPont Nemours and Co., and Delaware State Department of Public Instruction are cooperating in the effort. Delaware Technical and Community College, Delaware State College and the University of Delaware are involved.

The National Park Service is cooperating with Keystone Junior College in Pennsylvania in operating the Pocono Environmental Education Center. The center will provide environmental education and cultural programs for visitors to the Delaware Water Gap National Recreation Area.

For a relatively small amount of federal education money, $18,000, Dutchess Community College in New York is advancing the concept of "articulation." The term refers to coordination of planning between various levels of education. The college and the local vocational secondary school are working together to link up their curricula, to avoid duplication, facilitate transfer of credits from one institution to the other and to coordinate schedules and courses. Although it was not designed as such, the program has begun to serve as a model for broader articulation. Eventually it is hoped that the effort can be made state wide.

The Office of Federal Surplus Property Utilization made it possible for the state of North Carolina to obtain a surplus warship. Then with funds available under the Vocational Education Act, the ship was converted into a traveling marine laboratory. Using the lab, the Cape Fear Technical Institute, a two-year college, has developed its marine technology programs which train students for jobs in commercial fishery, boat building, marine biology, water desalinization and other fields. With a $50,000 grant from the National Science Foundation, students and faculty made chemical and physical analyses of the water and air on a 35-day trip at sea.

Alice Lloyd College in Kentucky received a major grant from the National Endowment for the Humanities. The $284,000 will be used for the college's Appalachian Learning Laboratory.

To save storage space and retrieval time, student records at Kern County Community College, California were microfilmed. A $27,000 grant under the Vocational Education Act permitted the college to hire handicapped students to microfilm records dating back to the opening of the school in 1913.

An unusual federal gift of land was made to Kingsborough Community College and two other institutions in Brooklyn, New York. The land on the Atlantic shoreline is valued at over $3.5 million. The college, which adjoins the property, will construct on it an educational facility for elderly and handicapped persons.

A federally-funded demonstration project in California involves colleges in the San Mateo Junior College District. In the first semester of the project, the cooperative education program permitted 2,000 students to enroll in off-campus jobs in local business and industry. Participating students were more than double the number projected to enroll.

Under the Vocational Education Amendment of 1968 the Fashion Institute of Technology received several grants. Included were programs for Spanish-speaking, disadvantaged adults to learn pattern-making; a vocational program in professional silk screening for disadvantaged youth; a study skills and reading improvement program for disadvantaged students; and a counseling project for art and design majors. The latter is designed to help students cope with medical, financial, social and psychological problems which have interfered with their academic goals. Federal support to F.I.T. totaled $ 728,000 in the school years of 1971-1973.

State and Local Funding of Two-Year Colleges

Unlike the program-oriented federal funding of higher education, state and local aid to higher education is usually appropriated for current operating expenses of the colleges and universities. All public colleges (and in some states private colleges to some degree) receive general institutional support. In varying ways, the states also provide student financial aid through scholarships and awards, special incentives for veterans or for study in particular fields, or through lowered tuition at particular schools. State education funds are derived from taxes, from special bond issues, and even from lotteries. The states also administer federal funds which usually flow to the colleges through state education agencies. Of particular importance to the two-year college are federal vocational education funds which reach them via the state agencies. In Michigan, for example, Monroe Community College trains mentally restored young people for college-level vocational programs with Vocational Education funds received through the state.

The level of an individual state's funding of two-year colleges depends upon many factors, among them the number of colleges in the state, the number of students enrolled, the type of curricula offered, the degree of local funding, and so forth. *The Handbook of Aid to Higher Education by Corporations, Major Foundations and the Federal Government* was updated recently with a major supplement on state funding of higher education. "The Fifty States" section lists the 1972-73 state tax-fund appropriations for higher education, indicating a breakdown for two-year public colleges in most states.

The funding listed below does not include this general institutional aid but instead is presented to suggest special programs and services which two-year colleges are called upon to offer with state and local sponsorship.

State-Funded Projects

The Fine Arts Council of Florida provided $5,000 to Miami-Dade Junior College for a program starting music instruction for children at an early age, and developing the program to advanced levels. Florida's Department of Education has also given the school small grants for an inventory of all college courses in four-year colleges and for a special food service program operated in conjunction with a Summer Youth Sports Program. The local Dade County Board of Public Instruction gave $4,891 to the college for an agreement enrolling 30 participants in a career opportunities program.

New York State pays tuition and expenses for 200 New York State employees enrolled in courses in Orange County Community College under a manpower development program. The state of California provided the initial grant for a pilot project at Palomar Community College enabling college faculty to reach rural minority students. A "moving classroom" brings educational facilities to the Palo Indian Reservation. The mobile van provides on-site education and

informs potential students of opportunities at the college.

California voters recently passed "Proposition 1," a measure which will provide $160 million in state matching funds for the construction of community college facilities. The state will contribute about $53 million a year over the next three years. The state funds will be raised through sales of general obligation bonds.

Dallas County, Texas voters have approved an $85 million bond issue in order to double the capacity of Dallas County Community College District.

The state of New York and the Community College Center of Columbia University sponsored a conference on problems of discrimination against women in higher education.

The state of New Jersey is cooperating with Mercer County Community College in bringing education to prisoners in the state. A major reason for prisoner recidivism is the ex-convict's inability to support himself by conventional means. Early efforts by the college indicated a definite improvement in prisoners' attitudes, behavior and employment possibilities when they became involved in the college's program.

New Jersey Bell Telephone engineers helped the college design a system of media instruction which includes "telelecture" and "electrowriter" units with telephone circuits. One faculty member can instruct simultaneously in four prisons. The system permits individual questions and answers to be relayed from different locations. In addition to the "remote" lecturer, faculty members visit prison classes on a regular basis. New Jersey contributed $250,000 to the college to put the Prison Education Network, serving four prisons, into effect.

Dallas County Community College receives funds from the Texas Education Agency. A sum of $73,490 was given to develop instructional units in a variety of technical occupational programs. Funds also support special services to handicapped students, occupational and educational needs of American Indians in Dallas, a pilot study for involving students in family health maintenance, and training of paraprofessionals to serve the deaf.

In New York, Nassau Community College is the recipient of numerous grants from the State Department of Education. Grants range from $933 for research in "Teratogenic Effect Bovine Serum Albumin and Immune Response" to larger sums supporting educational programs for ex-drug addicts in the county; training of teacher aides; and programs for guidance, admissions, placement, and remediation for engineering technology students.

The Missouri State Department of Education makes available small applied research grants for curriculum improvement to the Junior College District of St. Louis-St. Louis County. One $8,000 grant supported Operation Consumer Insight, a project to inform disadvantaged citizens of the rights, responsibilities and skills of being an effective consumer. The state also provided $45,097 for SCOPE, a program for educationally disadvantaged students in career education curricula. Students are given orientation programming, group and individual counseling and tutoring.

The State Department of Education of Nebraska has awarded $50,000 over a three-year period to Central Nebraska Technical College. Funds will be used to develop a demonstration program in occupational information through the use of 8mm color films and accompanying tapes. Completed film libraries are placed in high schools in the college district to disseminate the occupational information.

III. AREAS OF NEED AND OPPORTUNITY IN TWO-YEAR COLLEGES

Any attempt to define the financial needs and the academic and service possibilities of two-year colleges will inevitably fail. The needs and potentials are at once too broad and too specific to detail. With hundreds of the two-year colleges coming into existence since 1960, the field is new and vigorous and developing.

The preceding sections have described the growth, the goals, the strengths and achievements of community and junior colleges. Without a doubt there are weaknesses and gaps as well. These will require varying combinations of time, attention, public support, and financial aid to correct. Hopefully public understanding will help these institutions avoid the situation described by one frustrated college president: "They tell us they can't give us any financial support until we're doing a better job, but we can't do a better job until we get more financial support."

Naturally money alone will not answer problems, although thoughtfully applied funds can go a long way in bringing about real development in a particular

aspect of a college's activities. Also needed are public interest and involvement in community college and private college endeavors. This involvement may come through advisory committees made up of industry and other employers and interest groups; through participation as college trustees, consultants, visiting faculty, fundraisers, alumni and volunteers; through concern and support in local, state and federal legislation affecting higher education.

The following section suggests areas of need and of opportunity for financial investment in the work of two-year colleges. They have been expressed by college administrators, national education leadership, government officials and those who have made formal studies of the two-year college field. They are presented here for people involved in the funding of higher education as areas where personal and financial support can count. The list is by no means complete.

COMMUNITY AND JUNIOR COLLEGE ASSEMBLY STATEMENTS

A good indicator of the problems and goals facing two year colleges is the "Agenda for National Action" adopted by the Assembly of the American Association of Community and Junior Colleges. Among the many issues the 1972 Assembly found needing attention were:

- "... improvement and humanization of the liberal arts curricula and special programs for special groups, such as consumer education, internships and work-experience programs, and specialized training in cooperation with business and industry."
- "... creation of independent research and development groups from the community and from the colleges" to identify who the future students will be, what their needs will be, and what the community needs will be.
- Efforts to support "viable and relevant research and development for the articulation of bilingual and bicultural, and disadvantaged and minority student needs."
- Increased access to instruction at times and places convenient to students, greater utilization of the external degree, life experience and similar concepts.
- Inclusion of "personal development and self-realization as an essential responsibility to ... students, using appropriate people in the community as a resource. Faculty-staff-community-student relationships should be improved through these programs."
- Consideration of occupational education linked to business, industry, labor and government as a high priority.
- Utilization of new concepts of education and new technologies to personalize instruction.
- "Above all things, and at all times" flexibility and responsiveness to change to provide more effective education services.
- Curricular reform, programs based on specific student and societal needs, especially through career education.
- Improved graduate level preparation of two-year college administrators and faculty; funds to upgrade current staff.
- Improved internal relations between faculty, administration, counselors, and students.
- "Management information systems to test program and cost effectiveness are very much needed." Management systems to derive and use information about what happens to former students, how programs respond to identified student needs, resource allocation.
- Financial aid grants rather than loans to students.

CARNEGIE COMMISSION RECOMMENDATIONS

In its previously mentioned study of the two-year colleges, the Carnegie Commission has noted several areas needing development, including:

- More "articulation" between the two-year colleges and the four-year institutions to which many graduates wish to transfer. More students would continue their educations in four-year colleges if transfer could be effected without "losing credits" because of uncoordinated curricula in the two types of institutions.
- Expansion of occupational education making it more responsive to changing manpower requirements.
- Improved guidance. Because of many background factors community college students need more thoughtful counseling. At the age of 18, many are choosing their life's career.
- Remedial help for students which takes into account motivational and learning factors. Improved instructional materials which will reach students.
- Greater community service separate from the academic offerings of the college. Efforts in attacking unsolved problems and assisting the community in long-range planning.
- Extension of the college outreach beyond just industrial segments and the middle class to all members of the surrounding community.

- Improved recruitment, preparation and utilization of two-year college staff.

- Attention to the problem of rising costs, even in the community colleges, which threaten the ability of poor students to enroll and to remain in college.

- Programs and services to keep the "open door" of community colleges from becoming a "revolving door" for students who need special help to remain in school. The community colleges are called upon to do a job which other institutions cannot or will not do. Unfortunately, the Commission notes, it is assumed they have the resources, personnel and freedom from tradition to do it.

ADDITIONAL NEEDS AND OPPORTUNITIES

As new colleges open around the country, there will be many opportunities for local businesses and other organizations to assist colleges with capital needs, permitting them to make a stronger start than public funding sources permit. New colleges also can benefit from advisory committees made up of local leaders.

Financial aid is more readily available in four-year colleges than in two-years. Without it millions of students cannot attend college. More work-study arrangements would help out some students. Others lack funds to even pay for books, transportation and other related costs, let alone tuition.

More and better ethnic studies are needed. Bilingual curricula would make higher education possible for more Puerto Rican, Chicano and Indian students. Women's studies and services for women are needed. Several colleges have found that providing day care facilities for children has enabled many more women to attend school.

Until recently, few two-year colleges have been strong competitors for voluntary support because they lacked professional development staff. More and more two-year colleges are employing staff to acquaint the public and alumni with the job the college is doing and with its needs for public involvement and financial assistance. Help is needed, however, to underwrite costs of initiating development programs.

A survey of private two-year colleges by the National Council of Independent Junior Colleges indicates administrators are concerned with improving their student recruitment and admissions operations.

Other needs are for studies of student retention and for cost-analysis studies of academic programs. Lack of funds also may prevent curricular development and innovation in programs. Money and know-how for long-range planning are also needed. (These same needs are felt in many public colleges as well.)

Efforts are needed to raise the status of two-year colleges. The desire is not so much for prestige as for recognition of two-year college achievements and for consideration by funding sources.

Funds should be made available for regular assessment of the effectiveness of teaching two-year college students. Colleges and taxpayers supporting them should be aware of the need for "accountability," to demonstrate that successful educational experiences are being provided for many different types of students.

Certainly there is no lack of problems to be overcome, new approaches to be tried, programs to be developed. Those involved with the funding of higher education will learn from individual college administrators about the need for training in management skills for presidents, the need for additional work-study arrangement with industry, the need for research in teaching bilingual students, the need for expansion of teaching through television and other media, the need for corporate assistance in gauging future manpower needs. The two-year college field is an exciting one, and as more and more people become involved with its development, the colleges, the graduates, their employers, and the communities they serve will be strengthened.

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